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Current History

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Current History

OCTOBER, 1987

VOL. 86, NO. 522

Since its initiation by Soviet General Secretary Mikhail Gorbachev, the policy of glasnost (openness) has had a major impact on Soviet society. This issue examines the changes taking place today in the military, economic and political sectors of the U.S.S.R., and how these changes will affect Soviet domestic and foreign policy. As our lead article points out, "A pattern of Soviet initiatives in arms control continues. Whether a summit will, in fact, take place is unclear. But Gorbachev's desire to reach an agreement is clear. . . . and Soviet efforts to cooperate with the United States suggest a change in Soviet thinking, what the Soviet leadership is now calling the 'new thinking.'"

United States–Soviet Relations and Arms Control

BY LAWRENCE T. CALDWELL

Professor of Political Science, Occidental College

TWO years have passed since Mikhail Gorbachev became General Secretary of the CPSU (Communist party of the Soviet Union). In that time he has established himself as a political dynamo and policy innovator of a kind not seen in the Soviet Union since Nikita Khrushchev (1953–1964) and possibly since Lenin himself (1917–1923).

Gorbachev is shown by the Soviet media walking among the population, talking with Soviet workers, engaging in give and take like an American congressman on the campaign trail.¹ Such behavior is almost unheard of in Soviet politics. General Secretary Yuri Andropov (1982–1984) did a little of this grass-roots politicking, but his health prevented him from realizing his political goals.² Certainly Gorbachev's style is crafted to contrast with the stolid, remote figure of Leonid Brezhnev (1964–1982). This style has resulted in interesting exchanges with Soviet citizens—for example, during his visit to the Far East in July, 1986,

and to the Baltic republics in February, 1987.³

Gorbachev is more than a cardboard media figure. His dynamism has substance. He has overseen the *glasnost* (openness) campaign that has shaken the official communities of writers, theater and other creative artists. His strategy sees *glasnost* as a tool for shaking things up, for creating pressure on the bureaucracies he inherited from the Brezhnev period. *Glasnost* is usually translated "openness," but its real meaning is something more like "tell it like it is."⁴ This campaign is reinforced by another campaign—democratization. This has far deeper meaning than that most frequently focused on by American media. It means "pressure from below," by which Soviet citizens at all levels—workers on the shop floor, middle-level party and government officials—are encouraged to take responsibility, to criticize their "superiors" and to prevent the further entrenchment of the old Brezhnev bureaucracies. Democratization has no less an ambition than to reshape the political culture of the Soviet Union and to change a people, who have long been politically passive and have obeyed their leaders, into citizens who will take more responsibility for their own fate. The ideas of *glasnost* and democratization, therefore, reinforce *perestroika* (or restructuring), by which is meant the basic reform of the economy. Many Western observers were skeptical about Gorbachev's economic plans. The plans seemed terribly vague until the June, 1987, CPSU plenum, where he announced wide-ranging economic innovations. At that same plenum he demonstrated another feature of his dynamic

¹See, for example, his tour this past February of Riga, Latvia, Moscow Television Service reported in Foreign Broadcast Information Service, Daily Report, Soviet Union, February 19, 1987, pp. R3–R12 (hereafter cited as FBIS); or his trip to Krasnodar in September, 1986. See Moscow Domestic Service, FBIS, September 19, 1986, pp. R2–R4.

²See reports of Andropov's visit to a machine-tool plant in January, 1983, Moscow Domestic Service, FBIS, February 1, 1983, pp. R1–R3.

³*Pravda*, July 27, 1986, pp. 1–2.

⁴For an excellent discussion, see William H. Luers, "A Glossary of Russia's Third Revolution," *The New York Times* (hereafter cited as *NYT*), July 7, 1987, p. 23.

policy by bringing three new allies into the Politburo—Alexander Yakovlev, Nikolai Slyunkov and Viktor Nikonov.

These three pillars of Gorbachev's strategy—glasnost, democratization, and perestroika—are joined by a fourth: *novomysleniye* (or "new thinking"). It is this idea that represents the litmus test of how far Gorbachev is willing to go in changing Soviet behavior in the international system and in improving United States-Soviet relations.

An image developed in the late 1970's that had a powerful effect on American politics. This was the picture of the Soviet Union as an aggressive power, an "evil empire." The Soviet Union was seen as having taken advantage of détente in the early 1970's—steadily building up its military forces across the board, deploying SS-20 intermediate-range nuclear missiles after 1976, adding a new generation of ICBM's (intercontinental ballistic missiles)—especially the SS-18 and SS-19, after signing the SALT I (Strategic Arms Limitation Treaty) Interim Agreement in 1972, intervening in the Angolan civil war during 1974-1975 and in Ethiopia thereafter, and finally invading Afghanistan in 1979. This image had a broad effect. It created a suspicion of Soviet behavior that came increasingly to characterize President Jimmy Carter's administration, and it clearly contributed to his defeat by President Ronald Reagan in the 1980 election.

THE GORBACHEV FOREIGN POLICY INITIATIVES

General Secretary Gorbachev has taken charge of foreign policy with unusual speed and authority.⁵ He

⁵For example, see his speech in *Pravda*, February 26, 1986.

⁶For his speech in the Far East announcing these policy changes, see *Pravda*, July 29, 1986, pp. 1-3; for Soviet coverage of its "withdrawal" of a few units from Afghanistan, see Tass announcements reported in FBIS, October 9, 1986, pp. D1-D2, and October 17, 1986, pp. D1-D5, or the *NYT* coverage, October 9, 1986, p. 6.

⁷*Pravda*, February 26, 1986. Inferences of Soviet pressure of the Afghan government can be found in the following sequences of articles: first, see "Shevardnadze, Dobrynin in DRA on Working Visit," Tass, FBIS, January 6, 1987, p. D1; "DRA Political Chief Discusses Cease-fire," FBIS, January 13, 1987; "Afghan Asserts Soviet Troops Will Stay Until War Ends," *NYT*, January 19, 1987, p. 4. Second, see "Reportage of Keshitmand Visit to Moscow 17-18 Feb.," Tass, February 17, 1987; FBIS, February 20, 1987, pp. D1-D8; "DRA Foreign Minister in USSR En Route to Geneva," *Izvestia*, February 22, 1987, p. 4; "Soviet Hints at a New Afghan Timetable," *NYT*, March 3, 1987, p. 3.

⁸Soviet pressure can be inferred from speeches by the leaders of recipient countries during the past year or so, but the most explicit evidence came in a report on a conference at the Central Committee on June 22 "on further improvement of economic cooperation between the USSR and the SRV, the Mongolian People's Republic, and the Republic of Cuba, and of enhancing its efficiency." See *Pravda*, June 23, 1987, p. 2.

⁹*Pravda*, July 30, 1985.

appointed Eduard Shevardnadze as foreign minister and moved Andrei Gromyko from that post (one he had held since the administration of President Dwight Eisenhower) to the largely symbolic post of President of the Supreme Soviet. He brought Anatoli Dobrynin back from his lengthy service as ambassador to Washington and placed him at the head of the International Department of the CPSU Secretariat. The importance of these moves was that Gorbachev removed an experienced rival from the day-to-day operations of foreign policy and replaced him by an ally with little foreign policy experience. To bolster his own claims to command foreign policy, Gorbachev then brought his own expert on Soviet-American relations directly into the Secretariat, where Dobrynin would work directly under Gorbachev.

In terms of policy, Gorbachev has taken initiatives to ease tensions with China. Partly to that end, he has withdrawn token Soviet forces from Mongolia and Afghanistan.⁶ He has spoken of the Soviet intervention in Afghanistan as a "bleeding sore" and has brought pressure on the Afghan government to appear more conciliatory toward the rebels against whom it is fighting.⁷ While Gorbachev has not renounced any of the Soviet gains in the third world as a result of the interventionist policy pursued by Brezhnev in the 1970's, he has indicated clear limits to Soviet assistance to revolutionary movements and has brought considerable pressure to bear on principal Soviet clients—Vietnam and Cuba in particular—to use Soviet economic assistance more efficiently.⁸ His policy toward current clients and potential clients appears to be not yet fully established, but the Soviet Union seems to be taking a more cautious approach to the support of "national liberation" under Gorbachev than it had during the decade that preceded his leadership.

RELATIONS WITH UNITED STATES

This pattern of dynamic initiatives in foreign policy applies even more strongly in United States-Soviet relations, on which Gorbachev has placed very high priority. Indeed, given the reception its policy has had in Washington, the current Kremlin leadership appears to have almost a fixation on improving relations with the United States.

In late July, 1985, Gorbachev announced a five-month unilateral moratorium on nuclear testing beginning August 6, despite the fact that the Reagan administration made it clear that it would not join.⁹ This moratorium was to last until January, 1986, by which time the Soviet Union apparently hoped the United States would join. Washington adamantly refused and argued that the Soviet Union had completed its current test program and that maintaining American deterrence required continued testing. January and February passed without a change in positions; then, in March, Gorbachev extended the

unilateral moratorium "until the United States resumes testing."¹⁰ The United States resumed testing nine days later, and still the U.S.S.R. did not break the moratorium. Indeed, the August 6 anniversary of the original moratorium came and went with no change on either side.

Finally, Gorbachev extended the moratorium until January 1, 1987, with an announcement on August 18. The delay in making that announcement suggested that the decision to continue Soviet restraint on nuclear testing in the face of American intransigence had caused controversy in Moscow. In the end, the United States refused to join the moratorium, and the Soviet Union resumed testing on February 26, 1987. It would be highly surprising if this policy had not made Gorbachev and other advocates of the policy vulnerable to opponents in the Kremlin.

Similarly, on strategic arms reductions, Gorbachev offered compromises only to encounter intransigence, even defiance by the Reagan administration. Throughout 1985, the Soviet Union had taken the position that any progress in arms control generally required that the United States be prepared to accept limits on SDI (its Strategic Defense Initiative or "Star Wars").¹¹ The Reagan administration had made it clear that it would not accept significant constraints on SDI.¹² Despite this impasse and domestic criticism over the limited results of his summit with President

¹⁰*Pravda*, March 14, 1986. He then went on Soviet television two weeks later to propose a meeting with Reagan over testing and to threaten publicly that his country would resume if the US did not stop. See *Pravda*, March 30, 1986.

¹¹This linkage was made in terms that came very close to threatening a walkout of the Geneva arms control talks during a speech in Dnepropetrovsk. See *Pravda*, June 27, 1985.

¹²"'Star Wars' Is Not a Bargaining Chip, U.S. Says," Bernard Gwertzman, *NYT*, December 24, 1984, p. 7; "President Firm on Anti-Satellite Arms," Charles Mohr, *NYT*, March 2, 1985, p. 7; "Deal to Curb Arms Seems Less Likely," Don Oberdorfer, *Washington Post*, September 18, 1985, p. A1.

¹³*Pravda*, January 16, 1986, pp. 1, 2.

¹⁴Both the ABM and SALT issues heated up in May, 1986. On ABM, see Michael Gordon's reporting, *NYT*, May 31, 1986, p. 1, and June 4, 1986, p. 1. See also a strong critique by Abram Chayes and Antonia H. Chayes, *Harvard Law Review*, vol. 99, no. 8 (June, 1986), pp. 1956-1971. For SALT II controversy, see reporting by Bernard Weinraub and Leslie H. Gelb, *NYT*, June 13, 1986, p. 1. The actual announcement that the U.S. had exceeded SALT II limits by equipping the 131st B-52 with ALCM's came on November 28, 1986. *NYT*, November 29, 1986, p. 1.

¹⁵The offers came in an address to the French Parliament on October 3, 1985. See *Pravda*, October 4, 1985, pp. 1, 2. A detailed report of the visit by Senator Kennedy to Moscow can be found in "Kennedy Meets With Soviet Officials in Moscow," *Tass*, FBIS, February 6, 1986, pp. A7-A8; "More Reports on Senator Kennedy's Moscow Visit," Moscow Television Service, FBIS, February 9, 1986, pp. A1-A7. An account of Gorbachev's discussion of Kennedy is found in Philip Taubman's reporting, *NYT*, February 7, 1986, p. 1.

Reagan in Geneva in November, 1985, the General Secretary made a serious and detailed proposal to reduce strategic offensive systems in a major statement on January 16, 1986.¹³ In this initiative, he offered deep cuts in Soviet ICBM's (intercontinental ballistic missiles)—precisely those weapons the United States had been attempting to constrain during the strategic arms control talks. This represented a major concession and was expressly linked to American willingness to accept parallel constraints on strategic defenses. The United States response was to pocket the Soviet concession, to make it the baseline for further negotiations, while refusing to budge on SDI.

Moreover, during the late spring and early summer of 1986, the Reagan administration began a complex series of bureaucratic squabbles about whether to interpret the 1972-1973 ABM (antiballistic missile) treaty in a way that would permit testing of SDI components. President Reagan also deliberated in May about whether to exceed the limits of the unratified 1979 SALT II agreements by not dismantling older-generation United States Poseidon submarines as newer submarines were deployed. In the end, Reagan was persuaded not to break out of SALT II constraints in May, but threatened to do so "later in the year" as additional B-52 bombers were reconfigured to carry ALCM's (air-launched cruise missiles), unless the Soviet Union made additional concessions in areas where the United States charged (but the U.S.S.R. denied) failure to comply with the 1979 agreements.¹⁴ Thus, in strategic arms, too, Gorbachev took initiatives, made concessions, and was unable to make any headway against a stubborn American policy; nor was he able to get reciprocal concessions in the area the Soviet Union seemed most to want—SDI.

The SDI impasse in strategic arms made it increasingly apparent throughout 1986 that the most promising area for arms control between Moscow and Washington during the tenure of the Reagan administration lay in the area of INF (intermediate nuclear forces). Here, too, Gorbachev tried to make headway. In April, 1985, he suggested a mutual moratorium on INF, a proposal quickly rejected by the United States and NATO (the North Atlantic Treaty Organization) for its obvious one-sidedness (the Soviet Union had clear superiority in these systems). One of the issues in the INF negotiations in Geneva had been the Soviet Union's insistence that it would not reduce its SS-20 forces unless the French and British nuclear forces were included in reductions. The United States had refused to negotiate for its allies; in August, 1985, Gorbachev offered to reduce his SS-20 force to a level equal to that of the United States, Britain and France. The United States refused to accept this "linkage" of superpower INF systems to French and British forces. Gorbachev indicated¹⁵ during a trip to Paris in October, 1985, that the Soviet Union would consider de-

linking British and French forces, and he further modified his policy during a visit by Senator Edward Kennedy (D., Mass.) to Moscow the following February. By February, 1986, the Soviet Union was prepared to negotiate reductions of United States and Soviet INF if it received assurances that Great Britain and France would not increase their own nuclear forces. The Soviet Union made a parallel freeze of British and French forces a formal proposal on May 15, 1986.¹⁶ Again, the Americans refused even implicit linkages, and on March 1, 1987, Gorbachev finally agreed formally to de-link INF from allied nuclear systems.¹⁷

On another INF issue, Gorbachev compromised. The United States had proposed the "zero option" early in the negotiations. Since the Soviet Union had deployed the SS-20 intermediate-range missile at a time when NATO had no comparable ballistic missile system, "zero" meant in NATO's view a return to the status quo ante. The Soviet military resisted scuttling one of their most modern weapons systems, and NATO deployed the Pershing II's and GLCM's (ground-launched cruise missiles) as a counterweight. All of the Soviet Union's negotiating behavior before late 1986 sought to preserve some of its SS-20 force by reducing INF to "equal ceilings." Gorbachev finally agreed to "zero" for United States and Soviet INF systems in Europe at the Reykjavik summit.¹⁸ But the United States then resisted "European zero" because the Soviet Union proposed to leave 100 SS-20's in Asia, and at least some elements of the administration insisted on "global zero." Among other reasons, "global zero" meant that verification of compliance with any agreement would be far easier if no missiles were permitted than if the treaty had to specify which missiles would be permitted where. Again, Gorbachev made the concession—the Soviet Union would accept global zero.¹⁹

After Gorbachev's compromises in his March 1, 1987, initiative, NATO developed another reservation. It had always been implicit in INF that the removal of intermediate-range systems (600- to 3,000-mile ranges)

would raise the importance of short-range systems (300- to 600-mile ranges). NATO had no such missiles, but the Soviets had deployed SS-21's and SS-23's in East Germany and Czechoslovakia, supposedly in response to the NATO Pershing II and GLCM programs after 1983. These weapons were especially important to West Germany, since their range meant they would be used principally in attacking German territory. Some NATO and American analysts had always insisted that these systems be included in any INF agreement, but that had not been the official negotiating position. Once again, Gorbachev made the concession.²⁰ He accepted "global double zero" in July, 1987, meaning zero INF and zero short-range missiles in either Europe or Asia.

Gorbachev's arms control initiatives raise two important analytical problems: have they provoked opposition at home; and will they achieve the objective of reshaping relations with the United States?

PARTY-MILITARY RELATIONS

Intuition suggests that the scale of Gorbachev's proposed reductions in Soviet nuclear forces must have encountered resistance. Even if one does not take seriously the idea advanced at Reykjavik of eliminating strategic nuclear forces by the end of the century, a 50 percent reduction in those forces including substantial cuts in the most modern and capable Soviet systems—the SS-18 and perhaps even the SS-25—would involve a great reduction in capabilities and substantial financial waste. The disproportionate reduction in INF and short-range nuclear systems (over 2,000 Soviet weapons versus just over 300 United States weapons) is as visible to informed Soviets as it is in the United States. It is plausible that this policy has provoked debate among Soviet leaders and between the political leadership and the military.

Despite glasnost, debates on policy are never aired in public in the Soviet Union. But even before the "Rust affair" in May, 1987, there was evidence of tension in Soviet military policy. While few details are known, Western analysts believe that Gorbachev first called his top officers together in Minsk during the summer of 1985 to lay down the party's policy on military matters and to assert his authority.²¹ There was some indirect evidence that the military was not very enthusiastic about the outcome of the Geneva summit in October, 1985. By early 1987, evidence had accumulated that the CPSU was not happy with the pace of perestroika within the armed forces, and party

(Continued on page 344)

¹⁶*NYT*, May 16, 1986, p. 1.

¹⁷*Pravda*, March 1, 1987, p. 1. See also a press conference organized at the Foreign Ministry and featuring Gennadi Gerasimov, Alexander Bessmertnykh, Victor Karpov, and Marshal Sergei Akhromeyev on the next day. See Moscow Television Service, FBIS, March 3, 1987, pp. AA1-AA7.

¹⁸The best source was Gorbachev's press conference in Reykjavik. *Pravda*, October 14, 1986, pp. 1, 2. See *NYT*, October 13, 1986, especially the reporting of Leslie H. Gelb and Bernard Gwertzman.

¹⁹His proposal came in the form of a statement issued on March 1. *Pravda*, March 1, 1987.

²⁰See Tass account of an interview given to the Indonesian newspaper *Merdeka*. See *NYT*, July 23, 1987, pp. 1, 6.

²¹The Minsk meeting apparently took place on July 10, 1985. It has since been referred to in authoritative Soviet sources, but the date and content have not been disclosed. See Hedrick Smith's article in *NYT*, July 17, 1985, p. 4.

Lawrence T. Caldwell has been scholar-in-residence in the Office of Soviet Analysis, Central Intelligence Agency; a research associate at the International Institute for Strategic Studies; and a visiting professor at the National War College.

"If the reform movement fails—then, as Gorbachev has said, the last reserves of trust and commitment will have been exhausted. . . . If it succeeds, the Soviet people and the whole world will benefit from the liberated energies of a country kept back from its potential greatness by an exceptionally difficult history."

Gorbachev and the Reform Movement

BY LARS T. LIH

Assistant Professor of Political Science, Wellesley College

"THE party and the people have begun a duel with time. It is no exaggeration to say that the whole world, holding its breath, awaits the outcome of this duel."¹ With these words, the normally undramatic Andrei Gromyko, President of the Supreme Soviet of the Soviet Union, conveyed the sense of urgency behind the reform campaign of General Secretary Mikhail Gorbachev. Grasping this feeling of urgency is essential to understanding one of the most remarkable years in Soviet political history.

In 1931, Josef Stalin justified the upheaval he had initiated in Soviet society by noting that "it is sometimes asked whether it is not possible to slow down the tempo a bit, to put a check on the movement. No, comrades, it is not possible! . . . To slacken the tempo would mean falling behind. And those who fall behind get beaten." Mikhail Gorbachev adopted a similar intonation in his speech to the Central Committee in January, 1987: "It is often asked: aren't we taking too sharp a turn?" His answer: we need "genuinely revolutionary and all-embracing transformations in society [because] there is simply no other path for us. We can't retreat—there is nowhere to retreat to."² Although Gorbachev has borrowed Stalin's tone of urgency, everything about his campaign is aimed at undoing the system Stalin helped to create in 1931.

The rationale for the Stalinist system grew out of a perception of an external challenge and an internal opportunity. The external challenge was the military threat to the very existence of the Soviet system. The internal opportunity was the vast set of resources—human, technological and physical—that could be mobilized at top speed to meet this threat. These resources included underemployed labor power in the peasant villages, abundant natural resources and the opportunity to assimilate world technology rapidly.

The Stalinist system specialized in throwing these resources into the economy and directing them to top priority uses with very little worry about efficiency or quality. This *extensive* economic and political strategy enabled the Soviet Union to withstand the German Nazi onslaught in World War II and to become a global power.

Stalin's achievements help explain some of the loyalty many Soviet citizens show to an outmoded system. But the very accomplishments of Stalin's system removed the necessary preconditions for its own continued functioning. The nature of the external challenge changed drastically. The Soviet Union no longer faced any real threat to its survival, and the country had mostly caught up to world technological levels. Still, this meant that further progress could no longer be made simply by taking over foreign blueprints or by concentrating on survival tasks. The new external challenge of "high tech" required more sophisticated coordination of research and production, more involvement in the world economy, and more decentralized decisions about top priority uses.

The abundant internal resources available to Stalin and even to Nikita Khrushchev were no longer available: land, water, oil—all had to be used less wastefully. Most important, the labor force that the Stalinist system itself had educated and thrown into the cities could no longer be treated like the peasants of the 1930's and 1940's. Enthusiasm, personal survival and fear of repression were no longer sufficient motivation for highly skilled and dedicated work. Stalin's extensive strategy was obsolete; a new intensive strategy of efficient use of increasingly scarce resources was required. The old Marxist formula of changing from quantity to quality had to be applied in an unexpected way.

What has been said so far was fully understood in the Soviet Union in President Leonid Brezhnev's time.³ But the reform movement that started under General Secretary Yuri Andropov and that has reached startling dimensions under Gorbachev rests on two further perceptions. Any further delay in reform would mean not just a slowdown in growth but the destruction of Soviet society. And just as the threat was more

¹*Pravda*, July 1, 1987, p. 5.

²*Pravda*, January 28, 1987. Unless otherwise noted, all Gorbachev citations are from this speech or from the Central Committee speech of June 25, 1987. These speeches are the best introduction to Gorbachev's outlook.

³Thane Gustafson, *Reform in Soviet Politics* (Cambridge: Cambridge University Press, 1981).

than economic, the response also had to move beyond the economic system—the political system also had to make the leap from quantity to quality.

The crisis in Soviet society that Gorbachev and his supporters are at pains to expose is summed up in the euphemistic phrase, the “negative phenomena of the 1970’s and early 1980’s.” There is no doubt that the new leadership itself was shocked at the extent of Soviet corruption. The head of the Moscow party organization, Boris Eltsin, told an audience of propagandists about abuses in the retail distribution system: “We dig and dig, and still we don’t get to the bottom of this filthy well.”⁴ The corruption of the powerful was matched by the demoralization of the powerless. In his January, 1987, Central Committee speech, Gorbachev spoke of the “social corrosion” that led to “militant” consumerism, alcoholism, drug abuse and crime, especially among the younger generation.

Why had this frightening situation been allowed to develop? Because “the world of everyday reality and the world of sham well-being [reflected in official statements] grew further and further apart.” The press did not fulfill its function of signaling problem situations. This is the origin of the famous *glasnost* or openness. The extent to which *glasnost* has spread and entrenched itself is the big surprise of the year. Last year in *Current History* the remark was made that “the lesson of Chernobyl [and the slowness of Soviet reporting] is that a policy of ‘openness’ will remain meaningless so long as political leaders cannot be held accountable to society for their actions.” Top political leaders are still not accountable, but no one would still call *glasnost* meaningless. This is shown even in the coverage of Chernobyl; after the shockingly slow start, the accident was examined fairly comprehensively in the press and even became a symbol of the need for thoroughgoing reform. (A Soviet play on the Chernobyl accident, *Sarcophagus*, has been produced on the stage in West Europe.)

It is standard in Western commentaries to stress the limits to *glasnost* and its control by the top leadership. When this point is made to Soviet reformers—and because of *glasnost*, the point is made in the Soviet press—the response is something like this: “Yes, it’s true that *glasnost* could be turned off by the leadership—but along with *glasnost* will go our chance to achieve greatness as a country.”

A SOLUTION NECESSARY

Having exposed the evils of Soviet society, the new

⁴Elizabeth Teague, *Radio Liberty Research*, RL 277/86 (July 17, 1986).

⁵Robert C. Tucker, “Gorbachev and the Fight for Reform,” *World Policy Journal*, Spring, 1987.

⁶Aaron Trehub, *Radio Liberty Research*, RL 382/86 (October 7, 1986). “Social justice” is particularly associated with the sociologist Tatyana Zaslavskaya, many of whose articles can be found translated in the *Current Digest of the Soviet Press*.

leadership must provide a possible solution. Gorbachev’s own diagnosis begins and ends with the economy. The first clue that something was wrong was the close-to-zero economic growth, and the final criterion of success will be the “acceleration” of Soviet economic development at world competitive standards. But Gorbachev found that the “retardation mechanism” that prevented acceleration was so deep-rooted that it could be combated only by a *perestroika* of all spheres of society. *Perestroika*—the talismanic battle-cry of the Gorbachev reform movement—is usually translated “reconstruction” or “restructuring,” but perhaps Robert Tucker’s suggestion of “reformation” is best.⁵ The religious overtones are not wholly inappropriate; Gorbachev has stressed that *perestroika* is meant to apply to each individual’s psychology and “spiritual life.”

The aim of the *perestroika* can be simply stated: to persuade Soviet citizens to take responsibility for their own actions. But this requires in the first place a situation where the results of one’s actions have visible consequences for one’s own well-being. Much of the economic reform is aimed at achieving bankruptcy and dismissal for the lazy and inefficient, and rewards and promotion for the ambitious and diligent. This attack on egalitarian “leveling” is conducted in the name of socialism, whose basic principle (as opposed to the higher stage of communism) is “from each according to his ability, to each according to his work.”

A campaign for “social justice” is part of the Gorbachev reform, but some of the requisites of this social justice sound strange to Western ears: unsubsidized prices for food and housing, and the opportunity to make as much money as you want, as long as it is earned through honest labor.⁶

This rationale for the economic reforms is not surprising: the question is how far the reforms will go in practice. The real surprise came when this logic was extended to the political sphere. This occurred in January, 1987, at a full Central Committee meeting that had been delayed several times because of the controversial nature of Gorbachev’s proposals. Gorbachev later hinted that he would have resigned had he not found support for his proposals in the Central Committee.

Gorbachev’s proposals did not, of course, challenge the privileged position of the Communist party. The proposals were made in the context of “cadre policy”—that is, how to obtain a higher quality of official and to keep officials on their toes so they do not backslide into Brezhnev-era corruption. In order to do this, Gorbachev argued, relatively inefficient “monitoring from above” had to be supplemented with “monitoring from below.” If the local population and the central authorities had the same interest in competent managers, then central purposes would be served by giving more rights to those with local information. In

Gorbachev's words, "democratism will put everything in its place, and it will become clear who is who and who is capable of what."

THE NEW DEMOCRATISM

The first elements of this new democratism can be seen as an extension of glasnost: strengthening legal protection for public criticism. Gorbachev also wants local government authorities to be more active in improving the amenities of daily life. One method is multicandidate elections for local government councils (the Soviets). Although the single-candidate election seems to Westerners the very essence of Soviet-style socialism, the reformers can actually point to examples of multicandidate elections in the "fraternal socialist countries," particularly Hungary. Finally, Gorbachev called for multicandidate elections and secret ballots for appointments to official posts within the ruling Communist party. Although only a few experiments along these lines have been carried out so far, delegates to the national party conference scheduled for June, 1988, will be selected by secret ballot. Gorbachev wants this conference to be a "political examination of the course of the perestroika." It promises to be a landmark in the history of the Communist party of the Soviet Union.

Gorbachev's "democratism" of course has very little to do with Western-style competitive multiparty elections, the clash of independent interest groups and tolerance of dissidence. Perhaps the basic difference is that Gorbachev's democratism is meant to strengthen the position of the lower rungs within the vertical hierarchies that stretch from the local economic enterprise and party cell all the way to Moscow; it is not considered in terms of horizontal organizations that would unite people in a framework outside these centralized hierarchies, in the manner of a Western interest group. But even though it does not copy Western institutions, Gorbachev's democratism is no sham; it is a serious program meant to accomplish important purposes. That is not to say that it is sufficient to attain these purposes. The basic intent is to break out of the passivity created by the outmoded Stalin system and to create active citizens responsible for their actions. As Gromyko said when introducing a new law on the public consideration of important political questions, the aim is to make each person "the coauthor and participant of important matters. . . . While remaking their environment, Soviet people are remaking themselves."

While Gorbachev is not suggesting any political rival for the Communist party, he is proposing a redefinition of the party's role that may be just as frightening to party officials. Under the old system, one of the main tasks of party officials was "putting out fires"—intervening when problems got out of hand and straightening things out in a rough-and-ready way.

But the aim of the economic reform is to ensure that these problems do not occur and that coordination between enterprises is smoother and more problem-free. In corresponding fashion, the party's role is to be redefined as providing general political leadership without "petty tutelage" of the details of social activity. To many party officials, this must seem like a decorous way of kicking the whole institution upstairs.

In the meantime, however, the party is Gorbachev's main tool for carrying out the reform. It is not just hypocrisy but a genuine dilemma that Gorbachev has to reinforce his own authority in order to democratize the party. The Gorbachev reforms are a centralized campaign to end the necessity for centralized campaigns, and Gorbachev's declared intention is to run roughshod over any local official who does not support increased autonomy for local officials.

This means that leadership politics are more complex than usual, since they are played half by the old rules and half by new rules as yet unclear. According to the old rules, the object of the game is for the General Secretary to get a solid majority of his own appointees on the Politburo. In this, Gorbachev seems to be making definite progress. Two Brezhnev-era holdovers have been dropped: Dinmukhamed Kunaev, former party boss of scandal-ridden Kazakhstan, and Sergei Sokolov, the defense minister sacrificed after the German Cessna flew undetected into Red Square. (His successor, Dmitri Yazov, replaced Sokolov as a candidate member of the Politburo.)

On the other hand, Vladimir Shcherbitsky, party boss of the Ukraine, surprisingly held on through two full Central Committee meetings despite persistent rumors that he was on his way out. In June, 1987, three post-Brezhnev politicians were promoted to full Politburo membership: Viktor Nikonov, Nikolai Slyunkov and Aleksandr Yakovlev. All three are members of the party secretariat headed by Gorbachev; Yakovlev in particular has played a crucial role in the area of culture in the Gorbachev reforms.

The role of the chief Politburo opponent to Gorbachev is usually assigned not to a Brezhnev-era hold-over but to Yegor Ligachev, who was appointed to the Secretariat under Andropov and co-opted into the Politburo after Gorbachev became General Secretary. It is true that Ligachev's speeches always have more reservations and reassurances than do Gorbachev's, but given his record as a post-Brezhnev politician, this seems likely to reflect different emphases within a consensus on the need for perestroika. In his speech to the Central Committee in June, 1987, Gorbachev affirmed the unity of the top leadership; this might seem like so much boilerplate except that he carefully restricted it to "root questions of the perestroika," allowing for disagreements on important tactical matters. (There has been a very slight degree of glasnost about divisions and conflicts within the Politburo.)

It is hard to say how much the old Kremlinological rules still apply. As a small example, Gorbachev's June, 1987, speech was printed in *Pravda* without any of the usual indications of applause during the speech and only a sober note at the end that people listened to the speech with great attention. Is this evidence of lack of enthusiasm for Gorbachev on somebody's part? Or is it simply a reaction by Gorbachev himself against the sycophantic style of the Brezhnev era, where the General Secretary's speeches were regularly greeted by "stormy applause, turning into an ovation"?

The central reason that the old rules are no longer as helpful as before is that the real drama is not "the General Secretary versus the Politburo," but "the reformers versus the system." And "the system" in a sense includes everybody, for everybody has some sort of stake in things as they are. Perestroika will be painful for everyone, even for those who stand to gain the most. Attention is most often focused on the bureaucrats in between the central planners and the enterprise—the middlemen of the socialist economy—whose jobs will be made redundant by the reforms. But misgivings and resistance are much more widespread.

The workers have several grievances. The anti-alcohol crusade—which, despite the seriousness of the problem, does show the repressive and prohibitory side of the reform movement—is highly unpopular by all accounts, at least with male workers. A new stringent system of quality control has meant that workers are deprived of their usual income because of product defects they have little control over. Worker protests over this have been vocal and visible, and Gorbachev has referred to them sadly in his speeches. Many workers (especially unskilled workers) are not going to take kindly to other well-known aspects of the Gorbachev reforms, like greater wage differentials and less job security.

NATIONALITY POLICY

The other open protests have been over nationality policy, another weak point of the reform movement. There has been something of an anti-southern tinge to the reform movement. No doubt this is mainly because corruption has really been more deeply rooted in the Caucasian and Central Asian republics. Whatever the reason, the press has been filled the last several years with endless reports of purges and disgraced officials from the southern republics. Pronouncements on the nationality question have given the main emphasis to the battle against narrowness (usually non-Russian) and particularly against Islamic traditions.

⁷*Pravda*, September 18, 1986.

⁸Julia Wishnevsky, *Radio Liberty Research*, RL 100/87 (March 12, 1987).

⁹*Current Digest of the Soviet Press*, vol. 39, no. 18 (June 3, 1987), p. 5.

In August, 1986, the Politburo reversed a long-standing commitment to a river diversion scheme that would have hurt the Russians and helped the Central Asians. No doubt the main motive was the patent ecological riskiness of the project, but the nationality overtones of the controversy were evident to everybody. Meanwhile, Gorbachev quoted Dostoevsky about how wonderful the Russians are.⁷ And when the party secretary of Kazakhstan, Dinmukhamed Kunaev, was finally removed in December, 1986, the Politburo chose to replace him with a Russian who had never previously worked in the republic. This sparked two days of riots in Alma-Ata, the capital of Kazakhstan; one of the participants has been sentenced to death for causing the death of a policeman.

Perhaps even more unnerving for the reformers than this vociferous opposition to specific aspects of the reform is the suspicion that there are not enough people who will shake off their passivity and show the initiative necessary to make the new system work. The poet-singer Bulat Okudzhava expressed his pessimism by saying that although there was much talk about a revolutionary situation, there were still no revolutionaries to carry it out.⁸ In June, 1987, Gorbachev warned the reformers against the danger of "depression and even panic" in a way that almost suggested that he personally felt this danger.

Under these circumstances, leadership politics takes on wider dimensions. Gorbachev understands this. Any Soviet leader has a notebook full of stock Lenin quotations, but Gorbachev seems to favor those that speak of persuading the masses to understand the necessity of change. In contrast to Brezhnev's cult of impersonality, Gorbachev has gone on the road and taken his message to the people. This is more than a domestic charm offensive by a leader anxious to establish himself—it reflects the objective necessity of a new style of politics in which people must genuinely be persuaded.

This new politics also means that the leadership must listen to the people with greater attention—or, to put it in appropriately high-tech language, feedback mechanisms have to be improved. As a dissident ruefully said during the Brezhnev era, the Communists put a lot of effort into getting people to shut up, and now they will have to put a lot of effort into getting people to open up. One way to find out what people are thinking is to ask them in a sociological survey, and some revealing results from surveys of people's attitudes to the perestroika have been published.⁹ Another more traditional method is letters to newspapers and to leaders. Gorbachev prefaced his

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“... the reality of Soviet military power matches neither the ‘unprecedented’ military machine depicted by the United States Defense Department, nor the rather bumbling and archaic organization of rustic peasants sometimes implicit in other descriptions.” On balance, as this specialist sees it, “there is little likelihood that the Soviet Union can create a military machine capable of a successful drive for European hegemony, much less for world domination.”

The Two Faces of Soviet Military Power

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DURING the spring of 1987 two events focused the world's attention on the issue of Soviet military capabilities.¹ In late March, the United States Defense Department issued a new edition of *Soviet Military Power*. When United States Secretary of Defense Caspar W. Weinberger appeared before Congress to demand a three percent real increase in American defense spending, he maintained that Soviet policy had not changed since Mikhail S. Gorbachev became General Secretary of the Communist party of the Soviet Union. Its aim, he said, remained the acquisition of “an increasing amount of enormous military strength each year, without any restraints imposed by public opinion or public debate.”

As proof, the Defense Department reported an increase in numbers of long-range SS-25 missiles to about 100; the development of a more accurate version of the medium-range SS-20; tests, all unsuccessful so far, of a new variant of the SS-18 heavy missile; the development of a whole range of more effective conventional armaments; the successful aiming of low-power lasers at Western ships and aircraft; another reorganization of the Soviet Air Defense Forces (PVO) interceptor assets; continued progress in Moscow's own Strategic Defense Initiative (SDI); and so on.²

¹Unless otherwise noted, all figures are drawn from the appropriate editions of the London-based International Institute for Strategic Studies' annual, *The Military Balance*, which are summarized and analyzed, along with data from other authorities, in D.R. Jones, ed., *Soviet Armed Forces Review Annual* (hereafter cited as *SAFRA*), (Gulf Breeze, Fla.: Academic International Press, 1977-), the tenth volume of which is forthcoming. Those seeking greater details on particular services or topics should turn to this source. The U.S. Department of Defense data is drawn from *Soviet Military Power*, 7th ed. (Washington, D.C., March, 1987), and the structure of the Soviet Armed Forces is briefly outlined in David R. Jones, “Military Organization and Deployment,” in J. Cracraft, ed., *The Soviet Union Today: An Interpretative Guide*, 1st ed. (Chicago: Bulletin of Atomic Scientists, 1983), pp. 95–112.

²Michael R. Gordon, “Air-Defense Shift by Soviet is Seen,” *The New York Times*, March 25, 1987, p. 8.

³Felicity Barringer, “Soviet Launches Mightiest Rocket on its First Test,” *The New York Times*, May 17, 1987.

To many, these warnings seemed confirmed when on May 16, Moscow announced the launching from the Baikonur space center of the new *Energia*. Soviet leaders claim *Energia* employs “the most powerful engines in the world today” and will be used as the lift vehicle for their 100-ton space shuttle.³ But within three weeks of this success, the potency of the Soviet Union's armed forces suffered a blow that raised serious questions about the accuracy of many of the Defense Department's earlier assessments. On May 29, 19-year-old West German pilot Mathais Rust left Helsinki for home, suddenly turned east, penetrated the Soviet frontier, flew 400 miles across the Soviet Union, and landed his Cessna 172 in Moscow's Red Square. Ironically, May 29 was the Day of the Border Guards, 100 of whom were being arrested for drunkenness in nearby Gorky Park as the young West German signed autographs for bemused onlookers. Although the Soviet military later claimed that their interceptors had twice circled Rust's plane, the incident was embarrassing to the vaunted Troops of Air Defense (VPVO)—frontier sentinels of the air who man what the Defense Department insists “is already the most extensive strategic air defense system in the world.” Equally upsetting, on that same day Roman Svistonov, a 24-year-old Soviet defector, eluded this defense system and flew to freedom in Sweden in a cropduster.

The Politburo reacted decisively. Although of late the Soviet professional press has published criticisms of individuals in all five services, members of VPVO have been special targets. Indeed, there are indications that Marshal A.U. Konstantinov, who until recently headed the Moscow Air Defense District, was replaced *before* Rust's unexpected arrival. In any case, VPVO chief A.I. Koldunov lost his post “for negligence” and his command was charged with “intolerable unconcern and indecision about cutting short the flight of the violator plane without resorting to combat means.” The Politburo also insisted that this service's failure resulted from “a lack of due vigilance and discipline and major dereliction of duty in the guidance of forces by the U.S.S.R. Defense Ministry.”

As a result, Minister of Defense S.L. Sokolov was immediately replaced by Army General D.T. Yazov, who had only joined the ministry's inner circle in early 1987. Yazov subsequently took Sokolov's seat as a nonvoting member of the Politburo, and other reports identified Colonel General V. Tsarkov as the new chief of the VPVO's Moscow district and I. Tretiak, who like Yazov had recently served in the Far East, as the service's new commander-in-chief.⁴

These events point to a number of attitudes and longer-term developments. First, the Politburo's statement, as well as earlier and subsequent comments in the military press, indicates that the Soviet leadership takes a far less optimistic view of its capabilities than does the United States secretary of defense. Second, these doubts are long-standing, and in the mid-1970's they led to a revision of Soviet military doctrine. This brought a reassignment of responsibilities within the five Soviet Armed Forces—the Strategic Rocket Forces (SRF), the Ground Forces, the VPVO, the other Air Forces (VVS) and the Navy (VMF). With this came a restructured system of operational command, a revision of weapons acquisitions programs and, over the last four years, an almost complete turnover of personnel in the Soviet high command.

OFFENSIVE STRATEGIC FORCES

Discussions of the Soviet armed forces usually break them down into strategic (offensive and defensive) and general-purpose categories. Further, while tactical and operational (i.e., those with ranges under 1,000 km) nuclear-capable weapons are available to the theater of military operation (TVD) and general-purpose commands, decisions on their use are strictly reserved for the top political-military strategic leadership. This reflects the long-standing Soviet doctrinal precept that a nuclear conflict will be difficult to control, that the best calibrated escalation procedures will collapse in practice, and that the use of nuclear weapons at any level inevitably means an all-out nuclear exchange between the powers involved. For this reason, all nuclear systems are discussed under the strategic rubric, and conventional weapons are relegated to the combined-arms category. Yet the potentials of future nonnuclear munitions may soon make them of strategic significance.

Like the United States, the Soviet Union maintains

⁴These events are detailed in articles in the *The New York Times*, May 30–June 2 and June 18, 1987.

⁵Data drawn from John M. Collins, *US-Soviet Military Balance, 1980–1985* (New York: Pergamon-Brassey's, 1985), as presented in J. L. Scherer, ed., *USSR Facts and Figures Annual 10: 1986* (Gulf Breeze, Fla.: Academic International Press, 1986), p. 44. On the CIA's assessment of modernization programs see the agency's report to the Joint Economic Committee of the U.S. Congress, "The Soviet Economy Under a New Leader," (Washington, D.C.: U.S. Central Intelligence Agency, March 19, 1986), pp. 20–21, 23–26.

a triad of strategic systems represented by the Air Forces' long-range bombers, the Navy's submarine-launched ballistic missiles (SLBM's) and the Strategic Rocket Forces' ground-based intercontinental ballistic missiles (ICBM's). The International Institute for Strategic Studies (IISS) lists these as being combined under a single "strategic nuclear forces command" that is subordinated directly to the Supreme High Command.

But unlike the American triad, the Soviet Union's is heavily dependent on ICBM's. Although this leg's proportion had dropped from 76.6 percent of Soviet launchers in 1970 to 53.6 percent in 1980, in 1984 the figure was still 52.8 percent, and ICBM warheads still accounted for 5,230 of the Soviet total of 7,290. In comparison, in 1984 only 2,137 of the 10,237 American warheads were mounted on ICBM's.⁵

Under the doctrine enshrined in Sokolovsky's *Military Strategy*, the SRF became the senior Soviet service in 1959. It controlled all missile systems of ranges of 1,000 kilometers or further, was the centerpiece of Moscow's deterrent posture, and was expected to play the "decisive" role in any major conflict. The SRF in 1986 had an elite establishment of 298,000 specially selected men, who were backed by an additional 50,000 civilians.

According to the IISS, the number of Soviet ICBM's has been maintained at the agreed Strategic Arms Limitation Treaty (SALT) level of 1,398. SRF troops also serve 441 medium-range SS-20's and the remaining 112 older SS-12's. An additional 1,570 short-range systems are in the hands of the Ground Forces. While they, too, are nuclear-capable, their use in this role is under the same rigorous central control.

The other branches of the Soviet strategic triad are administratively parts of the Air Forces and the Navy. Some 95,000 men serve in the five Air Armies of the Soviet Union that make up strategic or long-range aviation. But while this branch has some 1,690 aircraft, only 160 are strategic bombers, and only 40 can carry up to six modern (1984) AS-15 air-launched cruise missiles (ALCM's). Otherwise, strategic aviation is credited with maintaining roughly 510 medium bombers. The rest of this branch's strength is comprised of various tankers, reconnaissance and electronic warfare machines, as well as 300 fighters assigned to base defense. As for the VMF's missile submarine fleet, it maintains 77 boats with a total of 983 SLBM's. Of these last, 39 are theater weapons and are not included within the SALT limits.

In Moscow's view, the creation of this force merely brought a strategic balance of "rough parity" between the superpowers. Yet since the mid-1970's, many Western analysts have warned that although the United States still enjoys a lead in missile accuracy and numbers of warheads, improvements to the Soviet ICBM force give Moscow better prompt, hard-kill capabilities.

ties and "breakout potential," thanks to a huge edge in terms of throwweight. More alarming still, Soviet modernization programs are proceeding apace and the United States Central Intelligence Agency predicts that by the mid-1990's all of the presently deployed strategic offensive forces are scheduled for replacement, along with improvements in the strategic aviation forces.

However alarming such reports are for the West when taken in isolation, the Kremlin sees matters differently. First, when Soviet programs are compared to the American development of ALCM's, the B-1 and advanced-technology (Stealth) bombers, the Ohio-class submarines and Trident-1 (C-4) SLBM's, and the MX Peacekeeper and small Midgetman ICBM programs, they appear far less formidable. Second, the significance the Soviet military accords its own strategic forces has altered radically, thanks to new doctrinal postulates. Indeed, there are some indications that the Ground Forces may be regaining the position of senior service that they lost to the SRF in 1959.

In any case, today's Soviet planners have an ambivalent attitude toward their strategic offensive forces. In accord with the prevailing view, these systems give the Soviet Union parity with the United States; so they negate the American nuclear arsenal and guarantee the Soviet position as a superpower. Yet the primary objective of Soviet military policy has always been the preservation of the Soviet state from the destruction that the use of such systems inevitably entails. It is therefore no surprise to find that the military-political leadership is seeking the maintenance of continued parity and, through arms control, a simultaneous reduction of the number of warheads that can strike their territory. This consideration explains Gorbachev's prudent but restrained program of strategic force modernization, why he is more than willing to accept an agreement removing United States theater missiles from Europe, and why he has offered deep cuts in strategic offensive armaments as well.

STRATEGIC DEFENSE FORCES

The same considerations color Soviet attitudes to strategic defense. Since 1948, the active air defense forces have been concentrated in the VPVO, which also received the missions of antiballistic missile (ABM)

and space defense in the early 1960's. As summed up by Marshal G.V. Ziman in 1976, this service was to ensure the destruction, "without exception, of every warhead that penetrates the depths of the country by air or by space."⁶ But in accepting the ABM Treaty of 1972, the Soviet Union accepted the impossibility of developing an effective antimissile defense. By 1978, it was also renouncing the use of space-borne weapons. It did deploy a primitive antisatellite system, but this guided space grenade has proved a failure in half its tests, which were halted in 1982. One expert classifies its performance as "abysmal," thanks to the low quality of sensors it employs for passive homing.⁷ The story is similar with regard to ballistic-missile defenses. Many British and even American experts remain unconvinced that the celebrated Krasnoyarsk complex—hailed by the Defense Department as a clear violation of the ABM Treaty—is intended for an ABM role, and few seriously believe that a Soviet "ABM breakout" is possible in the foreseeable future.⁸

If the Soviet Union remains vulnerable to a missile strike, the situation is not much better with regard to the air-breathing threat (bombers and cruise missiles). This is the responsibility of the extensive PVO network mentioned above, which in mid-1986 was staffed by some 371,000 men, who man the Moscow ABM complex. Although only the Moscow Air Defense District has been definitely identified, Western experts now speak of the existence of five air defense commands.

If the Far East is representative, the other three might correspond to TVD commands. If so, this revises the organizational structure adopted in the 1980's. At that time, operational control of aircraft, radars and surface-to-air missiles (SAM's) passed from the national headquarters to the local military district commands, which permitted the abolition of all the old air defense districts save that of Moscow. The United States Department of Defense reports that in 1986, 1,100 tactical aircraft were again shifted, this time from the military district commands on the Soviet periphery back into a more centralized system. American officials interpret this, along with an increase in quality and quantity of fighters/interceptors, warning systems and SAM's, as an effort to strengthen defenses against United States cruise missiles and other low-level intruders. Yet SAM's would use precisely the same route as did Mathais Rust, a fact that explains the Politburo's anger. And according to American estimates, a successful system will require great expenditures before it can face the threat of an American ALCM assault with even a minimal hope of success.⁹

A SOVIET SDI?

Against this background of disappointment, what is one to make of the American suggestion that Soviet ABM research amounts to a de facto SDI or Star

⁶G.V. Ziman, *Razvitie protivovozdushnoi oborony* (Moscow: Voenizdat, 1976), p. 192.

⁷Stephen M. Meyer, "Soviet Strategic Defense Programs and the US SDI," *Survival*, November-December, 1985, p. 276.

⁸Sayre Stevens, "The Soviet BMD Program," in A.B. Carter, ed., *Ballistic Missile Defense* (Washington, D.C.: Brookings Institution, 1984), pp. 194-195, and 208-218.

⁹Gordon MacDonald et al., "Soviet Strategic Air Defense," in R.K. Betts, ed., *Cruise Missiles: Technology, Strategy, Politics* (Washington: Brookings Institution, 1981), p. 72.

Wars program? Given the apparently overwhelming evidence presented in such publications as *Soviet Military Power*, Soviet calls for a ban on active weapons in space seem mere propaganda. Yet there is good reason to treat American reports of Soviet progress in the relevant technologies with considerable skepticism. Studies like those by John M. Collins and the Rand Corporation argue convincingly that the United States leads in almost every field, and that Soviet progress even in lasers and particle beams is more apparent than real. In fact, as Collins points out, the American lead is especially striking in precisely the most vital technologies connected with SDI—those of “electronics, optics, computer-science, sensors of all kinds, and stealth technology for satellites.”¹⁰

Second, even if Soviet progress is greater than these studies suggest, there is no evidence that Moscow intends to tie them together as envisaged in the United States Star Wars program. For example, before 1983 American investment in these same technologies was already substantial, and some fear that the SDI focus distorted rather than promoted further efforts. In the Soviet case, Moscow seemed to be continuing the research permitted under the ABM Treaty as a hedge against “technological surprise”; but it apparently has no desire to test its effectiveness in deployed systems. Indeed, the Soviet technological arguments against the American program only echo those the Soviet military made in favor of the ABM Treaty of 1972, which suggests that Soviet opinions have not changed.¹¹

CONVENTIONAL CAPABILITIES

The lessening Soviet interest in strategic defense is evident from Soviet spending on the PVO. Estimated as representing 45 percent of the “strategic ruble,” this peaked at around 15 percent of total defense expenditures in 1969–1970, but dropped to 12 percent in the mid-1970’s. Equally suggestive, the PVO’s reorganization in 1980 appeared to be as much an effort to increase the tactical air assets available to TVD commanders as a reorganization aimed against cruise missiles. The switch of doctrinal interest from strategic nuclear to general-purpose conventional systems is also paralleled by changed patterns of weapons acquisitions and deployments. As R.F. Kaufman

¹⁰Collins, *U.S.-Soviet Military Balance*, pp. 36–37; also see Simon Kassel’s reports, *Soviet Free-Electron Laser Research*, Rand R-3259-ARPA (Santa Monica: Rand, May, 1985), and *Soviet Research on Crystal Channeling of Charged Particle Beams*, Rand R-3224-ARPA (Santa Monica: Rand, March, 1985).

¹¹Jacob W. Kipp, et al., *Soviet Views on Military Operations in Space*, Texas A&M Center for Strategic Technology Strategic Studies SS86-1 (College Station, July, 1986), pp. 90–98.

¹²Richard F. Kaufman, “Causes of the Slowdown in Soviet Defense,” *Survival*, July-August, 1985, pp. 183–189.

¹³For updated discussions of Soviet naval potential, see recent editions of *SAFRA* and B.W. and S.M. Watson, eds., *The Soviet Navy: Strengths and Liabilities* (Boulder, Colo.: Westview Press, 1986).

points out, of the four categories of strategic offensive systems (bombers, ICBM’s, SLBM’s, missile submarines), the production rates of all but bombers have declined significantly.

Similar cuts appear in the net numbers deployed of four of seven strategic systems during 1978–1982; only SAM’s showed a major increase (900). In these same years, the numbers of deployed theater systems of all major types of equipment for the Ground Forces and of most categories of tactical aircraft also showed considerable growth. The same was true of the general-purpose naval forces. While the VMF’s inventory probably will shrink slightly during the rest of this decade, improved quality is expected to counterbalance the reductions.¹²

As a result of increased armaments, Army General E.F. Ivanovsky’s Ground Forces present an impressive facade. By mid-1986, they included 1,991,000 men (including 1,400,00 conscripts) who serve in 51 tank, 142 motorized-rifle, 16 artillery and 7 airborne divisions, as well as in numerous smaller units. There are also at least two new corps-type formations, created from recently reorganized divisions. The Ground Forces also have their own “Army Aviation,” which contains most of the Soviet combat helicopters.

Air assault brigades also have their own machines. In all, the Ground Forces are served by 1,350 armed and 2,150 transport helicopters. The remaining tactical air assets are organized into the air armies of A.N. Efimov’s Air Forces or VVS. The VVS’s transport wing is especially important in a country with poor land communications. In all, the VVS tactical and transport commands employ 497,900 men, apart from those in the five strategic air armies.

Many of the Navy’s (VMF) surface assets, as well as its five regiments of Naval Infantry and four brigades of naval *spetsnaz* troops, would serve in support of the Ground Forces’ offensives. Despite the appearance of its first true carrier and the acquisition of other modern warships like the *Kirov* and *Slava* cruisers, and the *Sovremennyi* and *Udaloi* destroyers, the VMF’s future building programs may be in doubt. Admiral S.G. Gorshkov’s successor, the submariner Admiral V.N. Chernavin, probably lacks Gorshkov’s political influence—influence that the VMF may miss sorely in conditions of restrained defense expenditures.¹³

Despite the importance of these air and naval forces, it is the conventional potential of the front-line Ground

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"Although Gorbachev has accomplished a great deal in his first 28 months of tenure, his actions do not add up to a well-formulated, consistent program of genuine economic reform. . . . The vast bulk of economic activity remains under state ownership and subject to state direction through compulsory plan targets."

The Soviet Economy Under Gorbachev

BY GERTRUDE E. SCHROEDER

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By his own admission, General Secretary Mikhail Gorbachev inherited an economy in a mess. Growth rates had fallen sharply in the economy as a whole and in the long-favored industrial sector. The overall productivity of resources used in the economy had declined markedly, and the technological level of the capital stock was backward in comparison with the capitalist West. Soviet manufactures were largely unsalable there, and their quality was the subject of perennial complaints from domestic purchasers. The rate of improvement in living standards had slowed to a crawl, and random shortages, black markets, and queues were pervasive.

A kind of malaise seemed to beset the populace: reduced work effort, widespread alcoholism, rampant corruption and a burgeoning underground economy. Such a state of affairs was not only highly unflattering to Soviet socialism's image abroad; it also threatened the Soviet Union's status as a superpower and the legitimacy of its political system. Gorbachev has vowed to turn the situation around, has mapped out a strategy for doing so, and has proceeded to implement it with vigor.

Gorbachev's goals and his strategy are vividly expressed in three Russian words that have become rallying cries and "buzzwords"—*uskorenie* (acceleration), *intensifikatsia* (intensification or an upsurge in efficiency), and *perestroika* (restructuring).

Above all, acceleration applies to growth rates for the economy and all its major sectors. The goals are set out in the twelfth five year plan adopted in June, 1986, and in the specific plans for 1986 and 1987. The growth of the gross national product (GNP) is slated to be about four percent annually during 1986–1990, double that achieved during 1976–1985, and then to rise to somewhat over five percent during the 1990's, thus returning to the growth rates of the 1960's. Similarly, industrial growth during 1986–1990 is targeted to be more than double the rate of the preceding decade and even higher during the 1990's. The gain in agricultural output in 1986–1990 is to be triple that of the preceding 15 years. The growth of investment is to accelerate and to be faster than the growth of consumption. As a consequence, only a modest gain

in living standards is planned for this five year plan, but they are to improve at a much faster clip in the 1990's, to realize an overall gain of 60 to 80 percent in real income per capita, the Soviet official measure of changes in living standards. These ambitious goals for the population's welfare are fleshed out in two much-touted complex programs—one for food and the other for consumer goods and services.

A critical part of Gorbachev's turnaround strategy is his investment program, designed to modernize the industrial sector in a hurry. Not only is the growth of investment to be accelerated, but priorities are to be altered in major ways. The bulk of investment is to go toward reconstructing and reequipping existing plants, rather than building new ones. As a concomitant, the share of machinery and equipment in total investment is to rise sharply at the expense of buildings and structures. In support of the drive to modernize the nation's antiquated capital stock, the plans call for nearly doubling retirement rates and replacing over one-third of the total capital stock by 1990.

This gigantic task is to be made possible by an increase of 80 percent in the amount of investment directed to the civilian machinery industries, compared with a gain of perhaps 20 percent in the preceding five years. With this investment, the machinery industries are to double the rate of growth of output and radically upgrade its quality and technological level. By 1990, 90 percent of all machinery is supposed to meet "world standards," compared with about 20 percent now.

Along with overriding priority for machinery industries, an increased share of the investment pie is slated for the energy-producing sectors in support of ambitious targets for accelerating fuel production, particularly the determination to reverse the decline in oil production. Since the chemical industry is scheduled for a 50 percent boost in investment and the agro-industrial complex's share is to remain high, other industries and the social infrastructure are being shortchanged.

The planned accelerated growth across the board is to be obtained by an upsurge in the efficiency with which labor and capital are used. Indeed, without

such a breakthrough, sustained accelerated growth is impossible. Demographic factors limit the growth of the labor force to about 0.5 percent per year, and the capital stock will necessarily grow more slowly than before because of past and present investment policies and the planned accelerated retirement of old capital. To achieve the economic growth rate targeted for 1986–1990, the growth of labor productivity of all resources will have to return to levels not experienced since the 1950's.

In addition to a sharp turnabout in productivity, Gorbachev's strategy also requires major improvements in efficiency in the economy's use of energy and raw materials. Strenuous targets are imposed for reducing the energy/GNP ratio, which is remarkably high by Western standards and has been rising, and for reducing the use of a variety of key raw materials per ruble of final product (e.g., tons of steel per billion rubles of machinery production). Along with savings in all resources, the strategy demands large gains across the board in the technical quality of manufactures and a radical upgrading of the modernity of their design.

To get the accelerated economic growth that he deems essential and the boost in efficiency that is required, Gorbachev has launched a vigorous and many-faceted campaign to "restructure" Soviet society. In a speech in August, 1986, he said:

Restructuring is a large word. I would equate the word restructuring with the word revolution. Our transformations, the reforms mapped out in the decisions of the April plenum of the party Central Committee and the twenty-seventh party congress are a genuine revolution in the entire system of relations in society, in the minds and hearts of people, in the psychology and understanding of the present period and, above all, in the tasks engendered by rapid scientific and technical progress.¹

Besides the restructuring of production and investment priorities already described, the term as a practical matter seems to involve two major aspects. The first is intended to alter the thinking and behavior of workers and managers, to transform them into disciplined employees who appear at work on time and sober, put in a full day's work, take personal responsibility for the quantity and quality of the product, and are innovative in seeking ways to produce more and better products with fewer resources. This facet is often described as mobilizing the "human factor."

The second aspect of restructuring centers around the perceived need to alter the basic parameters of the so-called economic mechanism, i.e., economic organization and incentives, to orient producing enterprises

and their employees in the directions desired. To bring this about, Gorbachev has called for "radical economic reforms."² In his nearly two and a half years of tenure, he has acted vigorously to further the desired restructuring, in an incredible number of speeches filled with exhortations and putting in place many concrete measures.

ACTIVATING THE "HUMAN FACTOR"

Continuing the campaign to enforce labor discipline begun under the late General Secretary Yuri Andropov, Gorbachev has moved about the country preaching the need for everybody to work harder and take personal responsibility for the quality of his own and his factory's product. In addition, the General Secretary has engineered a wholesale replacement of senior officials on a scale not seen since the days of Premier Nikita Khrushchev. In his first two years, he replaced more than three-fifths of the heads of the ministries and state committees concerned with the economy. To improve work attitudes, he has been stressing the need for democracy in the workplace and for extending a much wider range of decision-making authority to individual firms. A recently approved Law on the Socialist Enterprise amends a 1983 Law on the Labor Collective to provide for election of a permanent enterprise council to monitor implementation of decisions taken at meetings of the work collective and also for election of enterprise directors and heads of lower-level divisions by secret or open ballot of the work force.³ Other provisions of this and related government decrees accord the collective a wide range of decision-making authority over matters directly related to worker pay and welfare, limited, however, by a host of state-set regulations and guidelines.

The most consequential of Gorbachev's initiatives to improve labor discipline is his antidrinking campaign, which was launched by decree in May, 1985.⁴ In implementation of this decree, the state production of alcoholic beverages was cut by more than one-third during the first year; many stores selling liquor were closed; hours of sale were curtailed; and prices were raised sharply on two occasions. As a result, retail sales of alcoholic beverages in real terms fell 15 percent in 1985 and another 37 percent in 1986. Because of popular complaints and the evidence of an upsurge in moonshine production, the government has recently relaxed some of the restrictions on hours of sale. The antidrinking measures, it is claimed, have resulted in a marked drop in absenteeism and improved discipline on the job.

Finally, to assure the populace that his related goal of achieving "social justice" will be vigorously pursued, Gorbachev has launched a campaign against so-called "unearned incomes"—bribery, corruption, abuse of office, illegal production and sale of goods and services, and price-speculation.⁵ Subsequently, laws

¹*Pravda*, August 2, 1986.

²Gorbachev first used this term in his speech to the twenty-seventh party congress; *Pravda*, February 26, 1986.

³*Pravda*, July 1, 1987.

⁴*Pravda*, May 17, 1985.

⁵*Pravda*, May 28, 1986.

have been passed extending the range of permissible private economic activity, encouraging the establishment of small-scale cooperatives to produce goods and services for the population, and setting tax rates and regulations governing such activities.⁶ Thus, it would appear that the campaign against unearned income reflects largely an effort to co-opt the underground economy that by all accounts flourished under President Leonid Brezhnev. In another move to further "social justice" by enforcing the principle of equal pay for equal work, the leadership has launched an overhaul of the entire system of pay and work standards, a program that, along with encouragement of private activity, is likely to widen income differentials.⁷

ECONOMIC "REFORMS"

While sanctioning a wide-ranging public debate on reform proposals, Gorbachev has presided over a beehive of bureaucratic activity in implementation of his call for radical economic reforms.⁸ Dozens of official documents have already been issued. Aside from a mass of complexities, the actions taken since March, 1985, fall into three categories: the reorganization of bureaucracies; revision in working arrangements affecting individual firms; and miscellaneous other changes. Drafting the assorted measures and overseeing their execution is the job of a high-level body under the Soviet Council of Ministers.

Carrying out an idea frequently urged by Brezhnev, Gorbachev has established six "supra-ministries"—high-level bodies to coordinate and oversee related groups of industries or activities: the bureau for civilian machinery production, the bureau for energy production, the bureau for social development, the State Foreign-Economic Commission, the State Committee for the Agro-Industrial Complex, and the State Committee for Construction. In addition to setting up centralized bodies, the decrees establishing the State Committees fundamentally reorganize the bureaucracies dealing with those sectors. In response to the Chernobyl disaster, the government also created a separate Ministry for Nuclear Power and set up a State Committee for Computers and Information Sciences to stimulate the Soviet response to the information revolution. In addition, the all-union industrial

⁶*Pravda*, August 16 and November 21, 1986; *Ekonomicheskaya gazeta*, no. 19 (May, 1987), p. 14.

⁷The wage reform is supposed to be carried out in each firm when it can fund any increases in wages from its own resources by cutting staff and improving efficiency. Firms have been provided with a 40-page set of "recommendations" on how to implement the reforms. See *Sotsialisticheskii trud*, no. 2 (1987), pp. 57–96.

⁸This section relies heavily on an updating of the author's paper, "Gorbachev: 'Radically' Implementing Brezhnev's Reforms," *Soviet Economy*, vol. 2, no. 4 (October–December, 1986), pp. 289–301.

⁹Those words were used by Chairman of the Council of Ministers Nikolai Ryzhkov; *Pravda*, June 19, 1986.

associations—established by a 1973 decree to function as units between ministries and firms—have been abolished as "not having proved their worth,"⁹ and the drive to amalgamate individual firms into ever-larger entities called associations has been stepped up. Some 20 inter-branch complexes have also been organized to coordinate research, development and production of major products like industrial robots. These assorted reorganizations of organizational forms seem to be producing much uncertainty and confusion.

The core of Gorbachev's reform program in this area is the mandatory extension throughout industry and several other sectors of one or another variant of a so-called experiment begun under Andropov. The new arrangements include reducing the number of centrally set plan targets; according every firm greater latitude in dealing with certain facets of employment, wages and investment; making managerial incentives mainly dependent on fully complying with contracts for delivery of output; requiring firms to finance more of their current and capital outlays from their own revenues; and greatly increasing the use of long-term normatives (standard ratios between two variables) to regulate a variety of enterprise activities. An example of the latter is the recently imposed normatives requiring all enterprises to reduce inventory/sales ratios by fixed annual percentages.

A more "advanced" form of this scheme, touted as putting firms on "full self-finance and self-support," was put into effect as of January 1, 1987, in five ministries and selected other firms. This variant is slated for extension to most of the rest of the industrial sector and to several others in January, 1988. It differs from the other scheme in that it determines the amounts of enterprise incentive funds and obligatory payments like taxes by means of fixed (normative) shares of the firm's annual profits; these normatives, as well as the firm's production and rationed material allocations, are supposed to remain stable for the five year plan period. A second major difference is that the firm is required to finance all its expenditures (except for building new plants) from internal funds. These working arrangements for firms are codified in general terms in a new Law on the Socialist Enterprise, which takes effect on January 1, 1988. The law specifies the firm's rights and responsibilities and defines its relationship with its supervising ministry.

The cumbersome system of state rationing of raw materials and supplies to all firms has been simplified for small-scale purchasers. Penalties for infraction of contract commitments have been stiffened. Changes have been made in the system of price markups and discounts for many products, to encourage firms to improve their quality, expand the mix, and make new products. Because these and related incentives for improving quality have not had the desired effect, however, beginning in 1987 the government set up

State Acceptance Services in 1,500 large enterprises to enforce state-set technical standards and to monitor quality control, an approach patterned after that used to ensure quality in military production.¹⁰ A major decree mandates a sweeping overhaul of the entire system of pay and work norms, to be carried out enterprise by enterprise, with wage increases to be financed from money that the firm earns by reducing labor costs. Finally, a reform of the foreign trade system permits selected firms and ministries to engage directly in foreign trade and encourages them to set up joint ventures with foreign firms.

ECONOMIC PERFORMANCE

According to both Western and Soviet official measures, economic growth has improved only modestly under the Gorbachev leadership. Western measures show that during 1985–1986 gross national product increased at an average annual rate of 2.6 percent, somewhat better than the 2.1 percent average during 1981–1984. Comparable figures for industrial production are 3.1 and 1.8, respectively.¹¹ Performance in 1986 was markedly better than in 1985, thanks largely to milder weather and a banner year for agriculture. During the first part of 1987, however, industrial growth slumped badly, apparently the combined result of severe winter weather and disruptions caused by the introduction of stiff new quality standards and other parts of the economic reform package.

Although the hoped-for sharp acceleration of economic growth has yet to appear, notable successes were achieved in some strategic areas in 1986. Thanks to continued massive investments, a two-year decline in oil production was reversed, and coal production rose by a notable 25 million tons. Despite the loss of nuclear capacity at Chernobyl, electricity output rose 3.6 percent. High plan targets for some key machinery items were reached. And a reported grain harvest of 210 million tons was the largest since 1978, reducing the need to spend hard currency for imports of grain.

Some gains in efficiency were also registered, especially in 1986, when improved labor productivity accounted for more than three-fourths of the increased output in the economy as a whole and in the industrial sector. The productivity of capital continued its

¹⁰The sweeping powers of these new bodies are outlined in a lengthy statute, *Byulleten normativnykh aktov ministerstv i vedomstv SSSR*, no. 2 (February, 1987), pp. 6–28.

¹¹Data on the economy's performance in 1985 and 1986 are given in "Gorbachev's Modernization Program: A Status Report," a paper presented by the United States Central Intelligence Agency and the Defense Intelligence Agency to the Joint Economic Committee of the United States Congress, March, 1987.

¹²*Pravda*, January 18, 1987.

¹³Tass, January 21, 1987. Published in Foreign Broadcast Information Service, *Daily Report: USSR*, January 22, 1987, pp. 51–55.

¹⁴*Ekonomicheskaya gazeta*, no. 20 (May, 1987), p. 4.

long-term decline, although at a slower rate. Thus, Gorbachev's vow to turn that ominous trend around has yet to be realized. The campaign for labor discipline and sobriety, along with strong pressure on managers to curtail employment, no doubt contributed to the improved productivity picture. By the leadership's own admission, however, gains on the quality and technological modernization fronts were meager. According to the government's report on plan fulfillment for 1986, the proportion of top-quality products in total industrial output was only 15 percent, below the share in 1985.¹² A mere 4 percent of total machinery output represented models produced for the first time in the Soviet Union, not much above the 3.1 percent accomplished in 1985.

In its review of the 1986 plan results, the Soviet Council of Ministers noted:

The machinery and some other ministries . . . did not achieve a decisive breakthrough in developing vital directions of scientific and technical progress and raising the technical level and quality of output.¹³

In his speech to the party plenum in January, 1987, Gorbachev said that no progress had been made in improving the investment process. The new state quality inspectors rejected substantial shares of output in many plants during the early months of 1987, and the press continues to publish complaints that the new machinery being installed differs little from that which it replaced.

Consumers have fared poorly thus far under Gorbachev. In fact, by Western measures, real per capita consumption scarcely grew at all during 1985–1986, although some improvement was registered in 1986. An important reason for this stagnation was the nearly 50 percent fall in per capita consumption of alcoholic beverages, which have long had a heavy weight in Russian family budgets. Although more food, clothing and services were available, the government was not able to compensate fully for the fall in sales of liquor. Since wages continued to rise about as fast as in the past, the people found themselves with extra money that could not be spent on desired things; this resulted in forced saving and threatened the work effort. To maintain momentum, the government has stepped up its campaign for discipline, the latest move being a measure to pressure work groups, like shops and brigades, to "guarantee" work discipline among their members.¹⁴

The leadership has shown its concern about incen-

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"What is the significance of Gorbachev's Vladivostok address for Soviet policy in East Asia? Is it a new approach or the beginning of an offensive? Or is it merely a continuation of past policies, perhaps cast in a somewhat different light?"

Soviet Policy in East Asia

BY ROBERT C. HORN

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HISTORICALLY, the Soviet Union has been regarded as a European power. Since the Bolshevik Revolution, the Soviet leadership has focused on Europe ideologically, hoping for the spread of the revolution, and militarily, struggling to preserve the security of the new state. Asia has intruded on that Eurocentric concentration only intermittently, as in Moscow's involvement with the Kuomintang and the Chinese Communists in the 1920's and, of course, at the end of World War II against the Japanese in Manchuria.

Since Stalin's death, however, Asia has come to occupy an increasingly higher priority in Soviet foreign policy calculations. This has been due to several factors, including geography (more than two-thirds of the Soviet Union's territory lies in Asia), the growing rivalry with the United States and the widening Sino-Soviet split, and economic considerations, particularly the significance of energy and mineral resources in Siberia as these raw materials are becoming depleted in the European U.S.S.R.¹ At least since the Sino-Soviet competition for influence in the Afro-Asian world in the early 1960's, particularly in the struggle regarding the ill-fated "second Bandung" conference, the Soviet Union has been presenting itself as an Asian as well as a European power. Its efforts were crowned by Soviet President Leonid Brezhnev's proposal for a system of collective security in Asia first put forward in 1969. Nevertheless, the U.S.S.R. seemed to remain "a power in east Asia . . . [but] not an east Asian power" and Brezhnev's focus in large part reverted

to Europe and bipolar considerations vis-à-vis the United States.²

In July, 1986, Mikhail Gorbachev, the General Secretary of the Communist party of the Soviet Union (CPSU), delivered a speech while on a visit to the Soviet Far Eastern city of Vladivostok. Half of this lengthy address, broadcast live across the U.S.S.R. by Soviet television and radio, was devoted to Moscow's policy in East Asia. Pressing for the integration of the Asian and Pacific regions into the "contemporary system of international security," the Soviet leader called for a settlement in Kampuchea, the erection of a barrier to the proliferation and buildup of nuclear weapons in Asia, talks to reduce activities of naval fleets, the reduction of armed forces and conventional armaments, and practical discussions of confidence-building measures and the nonuse of force.

Gorbachev also announced plans for the withdrawal by the end of the year of six regiments of Soviet troops from Afghanistan, revealed that talks were being held with Mongolia about the removal of "substantial Soviet troops" from that country, and called on China to discuss "concrete steps aimed at proportionate lowering of the level of land forces" along their common frontier.

What is the significance of Gorbachev's Vladivostok address for Soviet policy in East Asia? Is it a new approach or the beginning of an offensive? Or is it merely a continuation of past policies, perhaps cast in a somewhat different light?

Before the foreign policy motivations and effects of Gorbachev's Asian policy as enunciated in Vladivostok can be understood, the internal dimensions of the policy and the speech must be recognized. Three aspects must be mentioned. First, half the speech was devoted to internal change in the Soviet Union. His Far Eastern trip was clearly perceived by Gorbachev as a significant step in his effort to build authority within the Soviet leadership. All his themes for accelerating economic development in the Soviet Union—reforms and restructuring—were applied to the Soviet Far East.³

A second internal aspect of the address called for more fully integrating economic development within

¹For a discussion of these factors and other significant aspects, see Donald S. Zagoria, "The Soviet-American Rivalry in Asia," in Marshall D. Shulman, ed., *East-West Tensions in the Third World* (New York: W.W. Norton, 1986), pp. 86-87.

²Gerald Segal, "Introduction," in Gerald Segal, ed., *The Soviet Union in East Asia: Predicaments of Power* (London: Heinemann for Royal Institute of International Affairs, 1983), p. 1. See also Richard Nations, "Moscow's New Tack," *Far Eastern Economic Review (FEER)*, August 14, 1986, pp. 30-34.

³I am indebted to Graeme Gill of the department of government, University of Sydney, for discussion of this aspect.

the Soviet Union with the economic dynamism taking place in East Asia.⁴ The Soviet Union needs to participate more actively in trade with regional states, Gorbachev said, in order to stimulate the Soviet economy. The Soviet leader's "urgent call for the more rapid and comprehensive economic development of the Soviet Far East and its closer integration into the Asia-Pacific region," as Gail Lapidus writes, "was coupled with a request that Soviet planning agencies facilitate increased Soviet engagement in the international economy by developing new approaches to economic cooperation with foreign countries, including joint ventures."⁵ Gorbachev specifically called for cooperation with neighboring countries in the solution of agricultural problems, raised the possibility of joint ventures with the Japanese, and urged Chinese cooperation in the use of the Amur River basin and in the implementation of the two countries' development plans.

Finally, Gorbachev's Vladivostok speech implied that peace and stability were needed in the Asia-Pacific region to enable the regime to focus its energy and resources on the internal changes that Gorbachev perceived as critical. Not surprisingly, then, foreign policy was intended to serve Moscow's domestic ends.

At least on the surface, Gorbachev's initiative had much in common with previous Soviet initiatives, particularly the Brezhnev initiative 17 years earlier. Fundamentally, the Vladivostok address represented another attempt by Moscow to portray the Soviet Union as a major power in Asia, a legitimate participant in the region's affairs, and an indispensable contributor to conflict resolution throughout the region. "The Soviet Union is . . . an Asian and Pacific country," Gorbachev reiterated, and the situation throughout that region "is to us of a national, state interest." At the same time, the new approach marked important differences. Gorbachev was trying to present an image of the Soviet Union as conciliatory, a good neighbor who was willing to offer concessions—as in Afghanistan and China—in order to further the cause of peace. Underlying his approach was an effort to develop new policies beyond the military. Given this new tone, the thrust pointed to far more vigorous Soviet diplomacy in the Pacific region, a far more active involvement in the affairs of the region and in bilateral relations.

CHINA

Gorbachev's Vladivostok speech was of particular

⁴See Gail W. Lapidus, "The USSR and Asia in 1986: Gorbachev's New Initiatives," *Asian Survey*, vol. 27, no. 1 (January, 1987), p. 3.

⁵Ibid.

⁶For a fuller discussion of the evolution of relations from Brezhnev to Gorbachev, see Robert C. Horn, "Soviet Leadership Changes and Sino-Soviet Relations," *Orbis*, vol. 30, no. 4 (Winter, 1987), pp. 683-699.

significance for China and Sino-Soviet relations. The speech was delivered, after all, "in a city that is but a step from the People's Republic of China," as Gorbachev himself pointed out. In the speech, he spoke of China in conciliatory terms and called for "additional measures for creating an atmosphere of good neighborliness" (emphasis added). Most significant, Gorbachev offered concessions with regard to two of the three obstacles that China has cited as barriers to normalized relations: the Soviet occupation of Afghanistan, the magnitude of Soviet forces along their common border and in Mongolia, and Soviet support for Vietnam in its occupation of Kampuchea. Thus Gorbachev announced the partial withdrawal of Soviet forces from Afghanistan, called for negotiations with China to lower border force levels, and revealed that talks were under way with Mongolia regarding troop reductions. He also implied, in a further concession to the Chinese, that Moscow might accept Beijing's definition of their mutual border along the Amur River—the main ship channel rather than the Chinese bank.

These important gestures to the Chinese were another step in Moscow's efforts toward the normalization of Sino-Soviet relations that had been under way since 1982.⁶ The Brezhnev regime had come to realize in 1982 that there was a significant opportunity in Sino-Soviet relations to lower tensions with China and reduce threats to Soviet interests, to exploit Sino-American differences, and to take advantage of the changes in China's internal policy. Despite some reversals, notably during the first half of Konstantin Chernenko's premiership in 1984, Sino-Soviet relations underwent a gradual improvement over the next several years. Particular progress was made in bilateral trade, which increased substantially, and in technical assistance, when Moscow agreed in 1985 to overhaul and modernize several dozen factories (originally built with Soviet aid during the 1950's) and to construct seven new plants.

Progress was far less substantial in the political arena, however. Until the concessions offered by Gorbachev at Vladivostok, in fact, there had been no movement at all. Since then, the partial Soviet withdrawal from Afghanistan has taken place but has been rejected by China and the West as a sham, and there has been no progress in developing acceptable terms for a Soviet withdrawal. On the other hand, the removal of an undisclosed number of the estimated 70,000 Soviet soldiers in the Mongolian People's Republic (MPR) seems to have been legitimate: it was begun in April and completed early in June.

Moreover, on the border question, the two sides resumed their discussions in February for the first time since 1978. The talks were described as "frank," meaning that the two had major disagreements, but it is significant that they were held at all. The two

sides declared themselves satisfied with the resumption of talks and agreed to have another session in the summer in Beijing, in which they will review the entire length of their border.⁷

On Beijing's third obstacle, Soviet support for Vietnam in Kampuchea, there has been no substantive progress. Gorbachev offered no concessions on this issue at Vladivostok but merely said that normalization of Sino-Vietnamese relations was "a sovereign matter of the governments and the leadership of both countries." China's response to Soviet "concessions" on the other two obstacles has been to insist that Kampuchea is now the number one obstacle and that the Soviet Union will have to pressure Vietnam to withdraw. Moscow has pressured Hanoi not to oppose the Soviet Union's attempts to normalize relations with China, but the Soviet leadership has been unwilling to apply sufficient pressure on the Vietnamese to force a withdrawal.

Continuing Chinese insistence on progress in this area may be having some effect. Since late 1982, Moscow and Beijing have been holding negotiations twice a year on the normalization of relations and through the first eight rounds the Kremlin refused to discuss issues involving third states. At the ninth round, in October, 1986, there were reports that the Soviet negotiator, Deputy Foreign Minister Igor Rogachev, arrived in Beijing declaring that he was ready to discuss *any* question of interest to both sides. This was never confirmed and, in fact, there was no reported discussion of the Kampuchean issue.

However, at the tenth round, in Moscow in April, 1987, the two sides revealed that they had "detailed discussions" on a number of topics, including "regional conflicts." Chinese commentary made it clear that these discussions included Kampuchea as well as Afghanistan.⁸ The talks were described as "beneficial" but also "frank" and there was no reported or evident progress on Kampuchea. Nevertheless, Chinese nego-

⁷See, for example, Moscow Television, February 23, 1987, in Foreign Broadcast Information Service—*Soviet Union* (FBIS-SU), February 24, 1987; *Kyodo* (Tokyo), February 28, 1987, in Foreign Broadcast Information Service—*China* (FBIS-PRC), March 2, 1987; and Nayan Chanda, "Territorial Talks," *FEER*, March 5, 1987, pp. 17–18.

⁸*Xinhua*, April 26, 1987, and April 27, 1987.

⁹For a fuller discussion, see Robert C. Horn, "Soviet Policy in Southeast Asia in the Gorbachev Era: Change or Continuity?" paper presented to the Workshop on Soviet Policy in the Asia-Pacific, East-West Center, Honolulu, Hawaii, March, 1987.

¹⁰The ordering of Gorbachev's list was: Indonesia (then Australia and New Zealand), the Philippines, Thailand, Malaysia, Singapore (then South Asian nations), and Brunei. The Pacific Island states came at the conclusion of the paragraph.

¹¹For a fuller discussion of the evolving nature of the Sino-Soviet-Vietnamese "triangle," see Robert C. Horn, "Vietnam and Sino-Soviet Relations: What Price Rapprochement?" *Asian Survey*, July, 1987, forthcoming.

tiator Qian Qichen, vice foreign affairs minister, enthusiastically emphasized that "we welcome the fact that the Soviet Union does not now refuse to discuss the Cambodian and Afghanistan questions with us."

SOUTHEAST ASIA

Over the past three decades, the Soviet Union has sought with varying degrees of intensity to extend its presence and influence in both Indochina and non-Communist Southeast Asia.⁹ These efforts have been successful in Indochina but less successful toward the states of ASEAN (the Association of Southeast Asian Nations comprising Indonesia, Thailand, Malaysia, Singapore, the Philippines and Brunei). At Vladivostok, the Soviet leader said of these non-Communist states that the U.S.S.R. was "prepared to expand ties" with them.¹⁰ However, the speech signified a more vigorous Soviet effort. In the Gorbachev era, there has been an intensification of Soviet gestures toward ASEAN, both before and since Vladivostok, with a marked increase in diplomatic visits, trade appeals and commercial negotiations.

Gorbachev's gestures toward China at Vladivostok had a very direct significance for Hanoi because of the degree of Vietnam's dependence on the Soviet Union and the extent of Sino-Vietnamese hostility. This greatly escalated the unease felt in Vietnam about the reliability of its Soviet ally.¹¹ The China aspect of Gorbachev's approach has also had an important indirect impact on the ASEAN states. The degree to which the Sino-Soviet rivalry has lessened and the potential for a further rapprochement will alter the political environment in Southeast Asia in unpredictable ways. At least since the late 1960's, Moscow's competition with Beijing has been the major motivating factor behind Soviet policy in Southeast Asia. The rivalry has been a strength for the Soviet Union vis-à-vis those countries who perceived China to be a major threat (mainly Indonesia and, secondly, Malaysia) and a weakness vis-à-vis virtually all the ASEAN states, none of whom has wanted to be dragged into the Sino-Soviet dispute. Second, if the Soviet change toward China is sufficiently substantive it could lead to a shift in Soviet policy regarding Kampuchea, the third and primary obstacle to a Sino-Soviet détente. Effective pressure on the Vietnamese to find a way out of Kampuchea would open up the possibility of transforming the geopolitical landscape of Southeast Asia.

Indeed, the test of Gorbachev's Asian policy for Southeast Asia is Soviet support of Vietnam's occupation of Kampuchea. ASEAN states keep asking Moscow for details on the implementation of the ideas put forth at Vladivostok, meaning, specifically, what is the Soviet Union going to do to resolve the Kampuchean conflict? ASEAN states are more inclined than heretofore to listen to what Soviet leaders have

to say, but the key remains whether or not Moscow will alter its policy.¹² A Malaysian commentary summarized the basic ASEAN position—with Thailand usually harsher and Indonesia softer:

It is the solid support given by Moscow and the Soviet presence in the Vietnamese naval bases that has emboldened Vietnam to entrench itself in Kampuchea. . . . It would be a realistic step toward peace in Kampuchea and stability in the entire Southeast Asian region if the Soviet Union could use its influence over Vietnam, which is considerable, to leave the Kampucheans alone. . . . It is vital that the Soviet Union should not harbor any illusions concerning ASEAN's attitude. If the Soviet Union is sincere about its numerous confessions concerning peace and goodwill, then it ought to do something positive about Kampuchea. If it does achieve that, then there can be no doubt a new chapter would begin in Soviet-ASEAN relations.¹³

The costs to Moscow of the current stalemate—as an obstacle to improved ties with ASEAN and with China and as a \$6-million-per-day burden to prop up the Vietnamese economy—are counterbalanced by substantial gains. In addition to increasing Vietnamese dependence on the Soviet Union and tying down Moscow's Washington and Beijing adversaries, the conflict has had the significant effect of enabling the Soviet Union to establish a tangible presence in the region, particularly a military presence at bases like Cam Ranh Bay. This has given Moscow a warm-water port some 2,200 miles south of Vladivostok, a port that significantly increases the Soviet Union's capability of rapid deployment in the Indian Ocean and Persian Gulf regions as well as in Southeast Asia. The communications and electronic surveillance facilities enable Moscow to monitor Chinese and American military activities throughout the region.¹⁴

FOREIGN VISITORS

A flurry of major diplomatic visits in the first half of 1987 provided an opportunity to assess Moscow's perception of the balance between these gains and costs. First, Soviet Foreign Minister Eduard Shevardnadze journeyed to the region (Thailand, Indonesia, the three Indochinese states and Australia) at the

beginning of March. Despite the hopeful expectations in Bangkok and Jakarta that Shevardnadze would be coming with significant new proposals for ending the impasse on Kampuchea, the Soviet spokesman indicated no change in Soviet policy. Shevardnadze presented a picture of reasonableness and openness—admitting that Moscow's Asian policy was at least in part an effort to reduce external pressures so it could concentrate on domestic issues—as well as his determination to secure a place for the Soviet Union as “a major, legitimate actor in the region with a political and economic—as well as its existing military—presence.”¹⁵ In mid-May, Thai Foreign Minister Siddhi Savetsila visited Moscow to pursue the matter further, hoping to capitalize on the interest the U.S.S.R. had shown in improving relations with Thailand and the rest of ASEAN since Gorbachev came to power. Once again, however, the Soviet Union indicated no alteration in its support for Vietnam; Shevardnadze merely reiterated that Moscow was still seeking a settlement of the conflict and that it did not believe the situation there was either deadlocked or incapable of solution.¹⁶

The third significant visit in this period was that of the new General Secretary of the Vietnamese Communist party (VCP), Nguyen Van Linh, who arrived in Moscow on the heels of Siddhi's departure. On issues other than Kampuchea, Moscow and Hanoi seemed to hold virtually identical views, and one analyst observed that “the tension in Soviet-Vietnamese relations after . . . Gorbachev's Vladivostok speech . . . appears to have dissipated.”¹⁷ Nevertheless, the same analyst noted the continuation of subtle differences over Kampuchea. No doubt, Hanoi was made uncomfortable by its patron's new willingness to discuss the Kampuchean issue with states opposed to Vietnam's role there: Shevardnadze had discussed Kampuchea on his Asian trip and the Soviet negotiators had allowed the subject to be raised during the April round of Sino-Soviet talks.

Moscow was thus walking a thin line. It was trying to convince both China and ASEAN of Soviet interest in ending the conflict while, in fact, not pressing the Vietnamese very hard on something so central to Hanoi's interests. With regard to both China and ASEAN, “rather than alienate the Vietnamese by pushing too hard for a solution in Cambodia, Moscow

(Continued on page 338)

¹²See, for example, Radio Singapore, January 14, 1987; in Foreign Broadcast Information Service—*Asia-Pacific* (FBIS-AP), January 16, 1987.

¹³Radio Kuala Lumpur, September 26, 1986; in *ibid.*, September 29, 1986.

¹⁴See Sheldon W. Simón, “The Great Powers and Southeast Asia: Cautious Minuet or Dangerous Tango?” *Asian Survey*, vol. 25, no. 9 (September, 1985), pp. 931–934.

¹⁵Susumu Awanohara, “The Bear at the Door,” *FEER*, March 26, 1987, p. 18.

¹⁶*Radio Liberty Research*, RL 187/87 (May 14, 1987); and Rodney Tasker, “Dealing with the Boss,” *FEER*, May 28, 1987, p. 32. *Moscow News* of May 24 reported that the two sides had had a “frank exchange of views.”

¹⁷Nayan Chanda, “Soulmates' Dissonance,” *FEER*, June 11, 1987, p. 24.

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"The Soviet Union can be expected to refer to Chernobyl as simply an isolated accident in a history that includes Windscale (United Kingdom) and Three Mile Island. . . . Evidence suggests, however, that the disaster was a direct consequence of the Soviet attitude toward nuclear power."

The Chernobyl Disaster

BY DAVID R. MARPLES

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IN April, 1986, the Chernobyl nuclear power plant, at 4,000 megawatts the largest in the Ukraine, was a station in crisis. Two major articles in the Soviet press in the previous two months had revealed serious labor and construction problems.¹ Four graphite-moderated (RBMK 1000) reactors had been built between 1977 and 1983 without a sufficiently skilled labor force. In fact, those who had acquired experience bringing into operation reactors No. 1 and No. 2 had been transferred to other Ukrainian nuclear plants, like the plant at Rovno. In addition, defective equipment, shortages of supplies and sudden changes in planning had reportedly demoralized the plant staff.

The experiment that was to take place on the turbogenerator on the night of April 25/26 had been tried before on Chernobyl's No. 3 reactor. Despite the Soviet claim that the experiment was "unauthorized," it is evident that a team of officials from the State Committee for the Supervision of the Safe Practices of the Atomic Energy Industry was at the fourth reactor building at the time. One of these officials, Deputy Chairman Viktor Sidorenko, was still unaware that the experiment was unauthorized some weeks after the accident occurred.

The experiment itself was not controversial. The idea was to ascertain how long the turbine could continue to provide electrical power to plant systems in the event of a loss of power. Under normal circumstances, if there is a power failure, diesel engines at the site can provide emergency power backup within about 30 seconds. The Soviet leaders believed that this time period had to be reduced, and consequently tried to use the electricity generated by the turbine

as it slowed down. In the nuclear industry, this is known as a "turbine tripping experiment."

The accident occurred for two reasons. First, the operators made a series of blunders, revealing their inexperience and inability to cope with the intricacies of nuclear power. But second, and more important, the technological flaws in the design of the Soviet RBMK reactor were ultimately responsible for the disaster. As one of the delegates to the International Atomic Energy Agency (IAEA) meeting in Vienna in August, 1986, noted, the psychology of the Soviet perception of nuclear power was markedly different from that in the West. Whereas North American nuclear plants operate on the presumption that accidents are not impossible, the Soviet authorities believed that a major accident was unimaginable and should not be imagined.

The experiment took place at the time of the first routine shutdown of the No. 4 reactor, which had been attached to the grid system in December, 1983. Had it been delayed, another opportunity would not have arisen for at least one year. The intention was to reduce the power of the reactor by 50 percent, to put all the steam into one turbine, and then to disconnect this turbine to operate the main pumps for a brief period.²

The experiment began in the early hours of Friday, April 25, 1986. By 1 P.M., the reactor was at 50 percent of its power and all the steam had been transferred to one turbine. But an unexpected demand for electricity—the reactor was feeding the Hungarian grid—meant that the reactor remained at 50 percent of full power. Nonetheless, the operator dismantled the automatic shutdown systems which, he felt, might abort the test. The most important factor was the switching off of the emergency cooling system.

Shortly after midnight on April 26, the operator made a mistake, causing power to drop to 30 megawatts (thermal), filling the reactor core with water and simultaneously causing a concentration of xenon. By 1 A.M., the power was back up to 200 megawatts, mainly because the operator had pulled out almost all the RBMK's control rods, some of which are used for emergency shutdown. When the test began at about

¹*Literaturna Ukraina*, March 27, 1986, and *Vitchyzna*, March, 1986, pp. 155-61.

²The account of the accident is based on the following sources: U.S.S.R. State Committee for the Utilization of Atomic Energy, *The Accident at the Chernobyl Nuclear Power Plant and Its Consequences*, information compiled for the IAEA Experts' Meeting, August 25-29, 1986, Vienna; V.G. Sneli and J.Q. Howleson, *Chernobyl—A Canadian Perspective* (Atomic Energy of Canada Limited, CANDU Operations, December, 1986); and *The Chernobyl Commission Report* (Toronto: Ukrainian Canadian Committee, April, 1987).

1:23 A.M., the water in the reactor core began to boil rapidly. Liquid water absorbs neutrons, but as it began to turn into steam, neutrons were not getting absorbed and the power increased. Although under "normal" circumstances, the reactor could deal with such a situation, since it was at low power and the core was now filled with water, the boiling led to a lightning rise in power. Some 40 seconds after the test began, the operator pushed the button that would drive the emergency rods into the core to shut down the reactor, which would have taken some 20 seconds. But the sudden power surge destroyed the reactor in only 4 seconds.

The Soviet managers could maintain, therefore, that the operator had violated procedures. Moreover, since the officials of the Safety Committee were on hand, they were also held responsible for failing to ensure that the experiment had been conducted properly. After the Politburo meeting on July 19, 1986, the chairman of the committee, Evgeni Kulov, lost his job. But essentially, operating errors were the secondary reason for the Chernobyl disaster. The major cause was the reactor design.

The Soviet RBMK was pioneered in the 1950's as a military reactor. Subsequently, it was adapted to civilian use. While its design has been criticized for inadequate containment above the reactor (it was well protected from below), a more serious fault was what is termed the "positive void coefficient" of the reactor itself. Simply put, if there is an increase in the amount of steam in the reactor core, the reactor power rises. In turn, more water converts into steam and the power rises still further. At full power, the reactor can be controlled, but at anything less than 20 percent of full power, it becomes notoriously unstable.

At Chernobyl, it was possible for an operator to bypass various safety systems, bringing about a situation with a dangerous low-powered reactor and an inadequate control system. The reactor fault, even if not unknown to the Soviet authorities when the RBMK was first developed, had been pointed out by a team of British engineers more than a decade earlier. But the Soviet managers had tried to offset this fundamental defect simply by informing their operators that they should avoid unsafe situations.

In turn, because of the rapid development of nuclear power in the Soviet Union, and especially in the Ukraine, which possesses about one-third of the country's total civilian capacity, the operators and engineers in the industry are undertrained and in many cases unqualified for their jobs. As *Pravda* pointed out on April 5, 1987, there are no training simulators for the RBMK in the Soviet Union (one is to be opened at the Smolensk plant in the future).

At the twenty-seventh party congress in March, 1986, future expansion in the industry was foreseen at the

rate of about 40 percent capacity rise annually. In April, 1987, Atomic Energy Minister Nikolai Lukonin suggested a slight modification: a projected rise of over 300 percent between 1985 and 1995.³

The explosion (or explosions, since it has never been established whether there was one explosion or two) released between 6 and 7 tons of material, or about 3.5 percent of the fission materials in the reactor core. The Soviet report to Vienna indicated that there were two main stages of release: April 26-27, and May 2-6, when the reactor core overheated for a second time after helicopter pilots failed to extinguish the burning graphite from above with sand, dolomite and lead pellets.

The immediate casualties were firemen from the plant's fire brigade, led by station fire chief Major Leonid Teiyatnikov, and the teams of Lieutenants Vladimir Pravik and Viktor Kibenok. As the fire raged in at least 30 places and threatened to engulf the third reactor building, it was fought by a small squad of between 17 and 28 men (Soviet sources vary) until the main brigades arrived from the city of Kiev at approximately 3:30 A.M. During those first two hours, firemen absorbed doses of radiation of between 500 and 1,500 rems. Virtually all these firemen were seriously contaminated; many collapsed on the spot and received first-aid treatment.

By 5 A.M., the main flames had been extinguished. At this stage, the local authorities displayed confusion and bewilderment over what to do next. On the day of the accident, schoolchildren went to school in Pripjat. Even that evening, it was noted in the Soviet press, children were playing soccer in the streets of the reactor town. Only on the following afternoon was an evacuation belatedly organized. The removal of residents from Chernobyl, about 12 miles distant, occurred only between May 2 and May 6, and then under protest from many local farmers. It followed a visit to the area by Soviet Premier Nikolai Ryzhkov and Politburo Secretary Egor Ligachev.

The situation was made considerably worse by the failure to provide any health warnings to the population for more than a week. Contaminated products were eaten and life proceeded normally. In Kiev, 80 miles to the south, the May Day parades continued unhindered. On May 5, when Ukrainian Health Minister Anatoli Romanenko issued the first health warning over Radio Kiev, panic occurred in the city. The railroad stations and Aeroflot offices were flooded with citizens anxious to leave the area.

Over the course of the next month, about 135,000 people were evacuated from the northern part of Kiev Oblast in the Ukraine, the Gomel Oblast in Belorussia, and the Bryansk Oblast in the RSFSR. All had been subjected to high levels of radiation exposure. The above figure does not include schoolchildren, who were removed from the cities of Kiev and Gomel by

³*Radyanska Ukraina*, April 24, 1987.

mid-May, and were not returned to their native areas until September. It also represents the number of those officially moved from their homes rather than the people who fled from the scene of the accident. Uncertainty, increased by the evident shortage of Geiger counters, prevailed.

In Belorussia, rayon health authorities assured local residents that within three weeks, all crops would be safe to eat. A soccer game was organized, ostensibly for the benefit of evacuees, in the rayon town of Bragin, which within a few days had to be completely decontaminated (without moving out the residents) when it was found that radiation levels were abnormally high.⁴

Soviet leaders found themselves unequipped to deal with a disaster of the magnitude of Chernobyl. A 30-kilometer (18.5-mile) zone was delineated but, initially, radiation readings in the zone were simply averaged out, giving the public little indication of the danger surrounding them. Thus on May 10, Radio Kiev stated that at the time of the accident, "the highest level of radiation in the 30-kilometer zone was 15-20 millirems per hour." By May 5, it stated, the rate had declined to 2-3 millirems hourly. A United States physician, Robert P. Gale, however, has indicated that some of the firemen were exposed to at least 800 rems. And the Polish newspaper *Nashe slovo* referred to levels of "several hundred rems" in the vicinity of the plant (based on Soviet information imparted to the Polish authorities).⁵ In short, Soviet citizens remained in ignorance of the real levels in the area.

By the first week of May, when the graphite fire had been brought under control, the government commission dealing with the effects of the accident decided to decontaminate the 30-kilometer zone. The commission's chief consultant was Evgeni Veiknov, vice president of the Academy of Sciences of the U.S.S.R. Initially, civilian labor was used for this hazardous operation, which involved removing contaminated topsoil, mainly by applying a solution that subsequently hardened and could be scooped up in quasi-polyethylene bags and stored in metal containers.

Because of the high levels of radiation, however, it was possible to utilize such labor for a maximum of only 30 days, and around the reactor itself, for only minutes at a time. Consequently, a decision was made to use military reservists for the task. The latter enabled the rigorous control necessary for such arduous duties. In the event, however, the soldiers were kept in the zone until early November. Away from the reac-

tor building, conditions were equally difficult. Regional newspaper reports indicate that many soldiers worked without protective clothing, shower facilities and adequate housing. In fact, the majority lived in tents or boats on the Pripyat River over the summer.

The soldiers, therefore, must be added to the number of those subjected to high levels of radioactive fallout. The main thermal plume affected the Belorussian republic, Lithuania, Latvia, Estonia and the Scandinavian countries, in addition to the Ukrainian S.S.R. Regional authorities were soon made aware of the dangers of iodine-131, but the impact of other isotopes, like cesium-134, cesium-137, strontium-89 and strontium-90, was seriously underestimated.

The most seriously affected victims of Chernobyl—some 206 persons—were treated in Moscow's Hospital No. 6, under the supervision of Dr. Angelina Guskova and Dr. Aleksandr Baranov. In early May, an American bone marrow specialist, Dr. Robert Gale of the UCLA Medical Center, and a team of specialists from the United States and Israel went to Chernobyl to perform bone marrow transplants on the most affected victims. With hindsight, the Soviet Union has claimed that the success rate for such operations was not high. To date 29 people (mainly firemen and first-aid officials at the No. 4 reactor) have been reported dead from radiation exposure, two from physical injury inflicted during the accident, and one, film director Vladimir Shevchenko, reportedly died of radiation sickness in May, 1987, after making a film in the Chernobyl area.⁶

The majority of those affected by radiation, however, were treated either on the spot by Drs. T. T. Toporkova and G. D. Seiedovkin, who had flown to the area from Moscow's Hospital No. 6, or in Kiev hospitals. While Dr. Gale supplied information about the state of patients in Moscow, little news was received in the West or in the U.S.S.R. about the situation at hospitals in Kiev.

Estimates of the ultimate casualty figure of Chernobyl have varied from a few thousand to half a million. Moreover, the data base for prognosis has varied widely. It is clear, however, that the total will be higher as a result of the lack of information and belated response on the part of the local authorities immediately after the accident. In addition, the environment in the areas affected will be seriously damaged for many years. Cesium-137, for example, has a half-life of 30.17 years; strontium-89 of 50.52 days; and strontium-90 of 29 years (multiplying each total by a factor of eight will give the approximate length of time of the residue of each element in question).

More recent items in the Soviet press have suggested that illnesses, both physical and psychological, have been occurring in the 30-kilometer zone, and particularly around Kiev. The Soviet explanation is that the malignancies are caused by a phenomenon

⁴*Pravda*, May 20, 1986; and *Izvestia*, June 7, 1986.

⁵*United Press International*, May 15, 1986, and *Nashe slovo*, June 29, 1986.

⁶At the time of writing, Shevchenko had not been added to the official tally of victims, which remains at 31. That he died of radiation sickness was confirmed by *Nedelya*, May 29, 1987.

labeled "radiophobia," i.e., the fear of radiation. Thus far, there have been two principal interpretations concerning the source of this disease.

In late May, 1987, Anatoli Romanenko, the minister of health of the Ukrainian S.S.R., maintained that fear of radiation had caused people to refrain from eating health-giving foods like milk and vegetables, thereby lowering their resistance to everyday ailments.⁷ According to Leonid Ilyin, the vice president of the Academy of Medical Sciences of the U.S.S.R., however, a person falling ill is afraid that radiation has caused the illness. In turn, this brings on stress, "which complicates the simplest of illnesses."⁸ In short, then, although Soviet authorities believe radiation to be the cause of these illnesses, the latter are believed to be psychosomatic, that is they are not directly related, in the Soviet view, to actual radiation.

Coincidentally with the introduction of the "radiophobia" phenomenon, Soviet scientists have launched attacks on Western prognoses of high future casualties from Chernobyl. Robert Gale was criticized on at least two occasions in the Soviet media in the summer of 1987. Ilyin, for example, with reference to Gale's "upper" limit of 75,000 future cancer victims, retorted that "Gale . . . is no expert, and one should approach his statements critically."⁹ In mid-June, Ilyin again denounced Gale's comments in an issue of *Robitnycha hazeta*. In this sphere, Chernobyl's fallout is already being subjected to revisionism in interpretation. The current Soviet view is that the fallout was much less than originally suspected and amounted to no more than an annual average of 10 rems per person in the 30-kilometer zone. It should be added, however, that such a figure would hardly have been sufficient to cause the devastation to the environment around the plant.

POLITICAL FALLOUT

The ultimate political consequences of Chernobyl will not be known until the trial of "guilty" parties, including V. Bryukhanov and N. Fomin, the former director and chief engineer of the station, has been completed in Kiev. Nonetheless, some generalizations can be made. The dismissals that occurred in May, July and August, 1986, affected three strata: plant operators; local party organizations; and ministries and state committees with jurisdiction over the nuclear power industry. Notably absent from the accusations of irresponsibility and complicity in the Soviet press were members of the Ukrainian party hierarchy.

Initially, there was much speculation in the West

about the futures of both Ukrainian party chief Vladimir Shcherbitsky and Kiev First Party Secretary Grigori Revenko. Some Western writers believed that Chernobyl had given Mikhail Gorbachev the excuse he required to remove Shcherbitsky, the "Brezhnev relic," from office. These beliefs were unfounded. Yet Moscow maintained that the party leaders, and General Secretary Gorbachev in particular, had not received an accurate account of the accident. Only on May 2, when a Politburo team went to Chernobyl, was the seriousness of the event ascertained.

While there is ample evidence to suggest that Moscow was aware of the impact of Chernobyl later on the day it occurred (April 26)—at which time medical squads were flown to the scene, and the air force major general who commanded the helicopter pilots, Nikolai Antoshchkin, was informed of his duties—it was politically expedient for Moscow to plead ignorance. In this way, international protests could be placated. Thus, Ukrainian officials were thrust onto the firing line.

On the other hand, to have dismissed or reprimanded key figures like Shcherbitsky would have been to call into question the nuclear power program in Ukraine. The ambitious expansion had been openly promoted by Shcherbitsky and his subordinates. Revenko was about to preside over construction of a nuclear power and heating plant for the city of Kiev. Instead, the emphasis was placed on lower-ranking officials, an emphasis that was also in line with the official view that gross criminal negligence had caused the accident.

By mid-August, it was clear that the all-Union Ministries of Power and Electrification and Medium-Machine Building would bear the brunt of the blame. The former lost two First Deputy Ministers, Gennadi Shasharin and Aleksei Makukhin, while the latter lost two deputy ministers. The Minister of Medium-Machine Building, the octogenarian Efim Slavsky, was retired in November, 1986, but this may not have been related to Chernobyl.

The director and the chief engineer of the Chernobyl station, V. Bryukhanov and N. Fomin, were removed from their positions and dismissed from the party. Of the local officials removed, however, the new Chernobyl director (subsequently replaced by the Leningrad nuclear plant's former chief engineer, Mikhail Umanets), Erik Pozdyshev, commented bitterly that most officials had been reinstated in their posts by October, 1986, through the medium of the courts.¹⁰ A new Ministry of Atomic Power Engineering was

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⁷Tass, May 23, 1987; and *Robitnycha hazeta*, June 3, 1987.

⁸*Radianska Ukraina*, June 13, 1987, and *Robitnycha hazeta*, June 17, 1987.

⁹*Radianska Ukraina*, June 13, 1987.

¹⁰*Pravda*, October 10, 1986.

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"Any signs of increasing efficiency in the agricultural system are at best very weak. Nonetheless, the kind of upturn that happened in 1985-1986 has been interpreted as the first result of an incipient policy of improving management, as a means of getting more out of resources."

New Directions in Soviet Agriculture

BY FOLKE DOVRING

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AFTER the secrecy of the early 1980's, which culminated in a news blackout on grain production, the current regime emphasizes openness (*glasnost*) and democratization. In the economic debates, the most frequent key words are reconstruction (*perestroika*) and quality. When 70 years of Communist party leadership has left a legacy that needs so much correction, openness is important. As usual, facts and ideology are entangled in ways that defy any prognostication.

One sign of *glasnost* in the current regime is the larger scope for published economic statistics, as evidenced in the 1985 edition of *Narodnoye khozyaystvo SSSR*.¹ The most important items on which statistics are now available for the first time in some years are grain production, life expectancy, infant mortality and alcohol use.

The newly released data on grain production generally fill the lacunas that were left in several recent issues of the Soviet statistical yearbook. Some but not all of the state-level yearbooks had data on grain production for part or all of the years when such data were blacked out on the national level.

Overall, the difference in statistical openness is moderate. There is now more information from official sources and this information can be substituted for estimates made in other countries or published by United Nations agencies. But the general character of published statistics from the Soviet Union in recent decades has not changed much. Advance releases in the *Vestnik statistiki* are about as meager as they used to be before the grains blackout. Even authoritative articles in central periodicals cite few overall statistics other than those released in the yearbooks and the *Vestnik*. Published Soviet statistics are still much less inclusive than even those from most East European countries, let alone from the non-Communist world.

Agricultural production in 1986 is made to appear in official publications as if a breakthrough to better performance had been achieved. The agricultural sec-

tor in the national accounts had a somewhat higher growth rate (5.1 percent) in 1986 than the economy as a whole (4.1 percent).² The matter comes into clearer perspective when several years are compared. For total agricultural production (a different concept from sector income), we obtain the following data (in billions of rubles at "comparable" prices):

1971-75	average	113.7
1976-80	average	123.9
1981-85	average	130.7
1984		135.0
1985		135.2
1986		142.1

With population growth about nine-tenths of one percent per year, the per capita domestic supply of farm goods has increased at about one percent per year since the early 1970's. This includes the effect of the grain imports on animal production. Unlike those of the 1970's, current statistics do not specify subtotals for crop and animal production.

The encouraging performance of the agricultural sector in 1986 is in no small degree the result of a resumption of a better level of grain output after several disappointing years, as seen in table 1. Taken in isolation, the figures from recent years can be deceptive. The total for 1986 is only slightly higher than the average for 1976-1980, and it is well below the peak harvests of 1973, 1976 and 1978, which were 222.5, 223.8 and 237.4 million tons, respectively. So far, the results for 1985 and 1986 merely fall within the range of variation from the previous 15 years. Per capita grain production in 1986 differs little from that of the early 1970's.

Data on other major crops also show a mixed picture (table 2). In all but one of the crops shown, the output of 1986 was exceeded by one or another of the five-year averages in the 1970's. For vegetables, the 1986 output was exceeded by that of 1984. In this case, data on irrigated land and its use show that vegetable output on such land accounts for a large part of all the increases over the years.

The ups and downs of crop output are not reflected in those of animal production (table 3). The continuous increase in meat, milk and eggs includes the effect of grain imports that were made to obtain this

¹Vladimir G. Trembl, "A Turning Point in Availability of Soviet Economic Statistics," *Soviet Economy*, vol. 2, no. 3 (July/Sept. 1986), pp. 277-282.

²*Ekonomicheskaya gazeta*, no. 5 (January, 1987), p. 10.

Table 1. Grain Production in the U.S.S.R., 1971-1986
(Million Metric Tons)

Specification	1971-75 average	1976-80 average	1981-85 average	1984	1985	1986
Wheat	88.9	99.7	77.9	68.6	78.1	92.3
Rye	11.5	10.9	14.3	14.0	15.7	15.2
Barley and oats	58.1	72.3	60.9	61.0	67.0	75.8
Maize (corn)	10.2	9.6	13.1	13.6	14.4	12.5
Millet	2.5	2.2	2.3	1.9	2.9	2.4
Buckwheat	1.0	1.0	1.0	1.1	1.2	1.0
Rice	1.8	2.3	2.6	2.7	2.6	2.6
Pulses	7.3	6.9	7.7	8.8	9.4	7.9
Total grains	181.6	205.0	180.3	172.6	191.7	210.1

Sources: *Narodnoye khozyaystvo SSSR* 1985 (for 1971-1985);
1986 from *Vestnik statistiki* 1987, no. 4, pp. 79-80.

Table 2. Production of Major Field Crops Other Than Grains in the U.S.S.R., 1971-1986
(Million Metric Tons)

Specification	1971-75 average	1976-80 average	1981-85 average	1984	1985	1986
Cotton	7.67	8.93	9.10	8.62	8.75	8.23
Sugar beets	76.0	88.7	76.3	85.4	82.1	79.3
Sunflower seed	5.97	5.31	4.97	4.53	5.23	5.3
Potatoes	89.8	82.6	78.4	85.5	73.0	87.2
Vegetables	23.0	26.3	29.2	31.5	28.1	29.7

Sources: 1971-85: *Narodnoye khozyaystvo SSSR* 1985.
1986: *Ekonomicheskaya gazeta*, no. 5 (January, 1987), p. 12

Table 3. Production of Animal Products in the U.S.S.R., 1971-1986

Specification	1971-75 average	1976-80 average	1981-85 average	1984	1985	1986
Meat, million metric tons	14.0	14.8	16.2	17.0	17.1	17.7
Milk, million metric tons	87.4	92.6	94.6	97.9	98.6	101.1
Eggs, billions	51.4	63.1	74.4	76.5	77.3	80.3
Wool, thousand metric tons	442.0	460.0	457.0	465.0	447.0	465.0

Sources: Same as Table 2.

result. Per capita meat production rose at least as fast as agricultural production as a whole, eggs even more, milk very little—all of which agrees with the expected income-related demand for these goods. Wool, a product that comes mainly from extensive pasture with very little potential for yield improvement, has not changed much and is declining on a per capita basis.

YIELD POTENTIAL AND PLAN TARGETS

The results so far fall a good deal behind earlier plan targets. Six years ago, the plan called for an

average of 239 million tons of grain for 1981-1985.³ The 1990 food program was not very bold in wanting to obtain 250-255 million tons, either as an average for 1986-1990 or for 1990.⁴ The current five year plan (1986-1990) calls for an increase in grain production of 60 million tons, uncertain as to its statistical base.⁵

The statistics by kind of grain in table 1 point to the difficulties of achieving earlier harvest results. Wheat, generally regarded as the most valuable of the major grains, has a higher total in 1986 than in the years of low grain harvest but has not regained its position of the 1970's when wheat amounted to nearly half the total grain output. Data on land brought under irrigation or drainage show that such meliorations account for some of the increased grain output. This leaves rain-fed lands without drainage with somewhat more of a yield backlog than the overall figures would indicate.

³*Ekonomika sel'skogo khozyaystva*, no. 12 (December, 1981), p. 4.

⁴"The 1990 Food Program," in *Ekonomicheskaya gazeta*, no. 23 (June, 1982).

⁵A. Zholobov, "Intensivnye tekhnologii proizvodstva zerna," *Planovoe khozyaystvo*, no. 1 (January, 1987), pp. 35-41.

The inherited role of wheat as a livestock feed in the Soviet Union may make a partial switch to more coarse grains rational. But the lesser role of wheat may still reflect some weakness in the principal wheat areas—in southeastern Russia, the eastern Ukraine, Siberia and northern Kazakhstan.

The origin of the yield variations is not entirely clear. It does not appear that the weather of 1986 should have indicated a bumper crop. The large crops in the 1970's may have led some planners to overestimate the potential for increasing grain yields.

The range of alternative interpretations hinges in part on what one makes of the effect that the Volga regulation should have had on the climate in the Caspian basin. The expected lowering of the Caspian Sea, which continued for several years and which should have made the region drier, has been reversed in the last two years. The causes are not clear. If this change is due to a positive random variation in precipitation around the basin, then the large closed salt lake may begin to fall again, with renewed difficulties for crop production in the region as a consequence.

Regional data confirm that crop yields are more variable in the drier regions and that humid areas like Belorussia and the Baltic republics have a steadier upward trend in crop yields than the country as a whole.

RESOURCE BASE AND PRODUCTIVITY

The Soviet Union has more land for agricultural use than the United States, but its average quality is substantially lower, primarily because of climate. The total potential for primary agricultural production is generally estimated to be a good deal smaller than that of the United States.

From the data in tables 1 and 2 we might conclude that the yield potential of the Soviet Union is beginning to be exhausted and that future growth in primary agricultural production can only be modest, as the 1990's food program indicated. Such a conclusion may seem supported also by information about productivity. But this would disregard the influence of managerial factors on the production results. Soviet planners are wondering whether a different approach to the organization of agricultural production might yield better results. The theory of economic institutions says that this may well be so.

Productivity should be an expression of physical

⁶V. Gavrilov, "Metod izmereniya proizvoditel'nosti truda v sel'skom khozyaystve," *Ekonomika sel'skogo khozyaystva*, no. 2 (February, 1987), pp. 45–49.

⁷Folke Dovring, "Capital Intensity in Soviet Agriculture," in *Agricultural Policies in the USSR and Eastern Europe*, R.A. Francisco, B.A. Laird and R.D. Laird, eds. (Boulder, Colo.: Westview Press, 1980), pp. 5–26.

⁸A. Brylev and V. Retsev, "Energoemkost' sel'skokhozyaystvennogo proizvodstva," *Ekonomika sel'skogo khozyaystva*, no. 6 (June, 1986), pp. 36–45.

proportions, like crop yield per area unit, output per unit of manpower, and output per unit of energy used. The related expressions for productivity of capital goods are not physical proportions; rather, they are related to economic proportions between the value of capital goods and the value of output. Labor productivity in Soviet agriculture does not change rapidly, because the agricultural labor force declines only slowly—much more slowly than in other countries at similar levels of industrialization and of capitalization in agriculture.

The total number of workers employed in the "agroindustrial complex" has increased slightly since the 1970's, from about 42 million to over 42.5 million. This helps to account for the high level that the cost of food occupies in the budgets of Soviet citizens. When forestry, food industries, construction, supply activities and transportation are excluded, then the work force in kolkhozes, sovkhoses and interfarm enterprises comes to over 27 million in 1970, 1980 and 1985. Of this total, agriculture proper employed 24.1 million in 1970, 22.9 million in 1980 and 22.4 million in 1985—a rate of decline of .01 percent per year.

This large labor force is reflected in continuing modest rates of production per unit of labor employed. Those rates published show that in comparison with United States labor/output ratios, labor requirements in the Soviet Union are several times higher—for small grains about 4 times higher, potatoes, 8 times, cotton, 12 times, milk, 10 times, and meat, 15 times or more.

This is only for direct labor input on farms. Indirect labor inputs in the rest of the economy to supply factors to agriculture are more difficult to estimate. In the United States, they are now of a similar magnitude as the direct labor inputs on farms. Those in the Soviet Union appear to be even larger. The total of all labor used to supply the Soviet population with food is likely to be in the range of 45–50 million.

The point about indirect labor is supported by a recent analysis of agricultural productivity.⁶ According to this analysis, gross output per worker in Soviet agriculture nearly doubled between 1965 and 1985 and gross income in rubles per worker nearly tripled, but when external costs are factored in, the progress in 20 years is very little (6 percent).

ENERGY USE

Energy productivity in Soviet agriculture is also low and declining. An earlier study, based on the input-output tables of 1966 and 1972, showed that total (direct and indirect) energy consumption in Soviet agriculture was at least 10–12 percent of the national energy budget.⁷ The corresponding figure in United States agriculture is about 4–5 percent.

A recent article shows that direct energy consumption in Soviet agriculture, per 1,000 rubles' worth of output, in 1981–1984 was nearly one-half larger than in 1966–1970.⁸ Compounding this by the output index,

we obtain a gross increment of 85 percent in 14 years. The rate of increase was highest in electricity, which uses proportionately more indirect energy than do other kinds of energy goods. Total gross energy use by and for agricultural production may have doubled, and the increase per 1,000 rubles' worth of farm goods is more than 50 percent. The increase was slowest in petroleum fuels, but even in this case the gross increment is 40 percent in 14 years.

Against this doubling of energy use for agricultural production stands an increase in fuel production in the same years of less than 80 percent. Thus agriculture draws more heavily than ever on the country's energy resources.

Other external inputs are also on the increase. In chemical fertilizers, the Soviet Union has now overtaken the United States. Even per capita of the population, fertilizer use in the Soviet Union is now larger than in the United States, with over 90 kilograms of pure nutrient content for every person in the U.S.S.R. The total has increased steadily and rapidly from 10.3 million tons in 1970 to 17.3 million in 1975, 19.2 million in 1980 and 25.4 million tons in 1985. Per capita, this is lower than in Hungary, Bulgaria and Czechoslovakia (the former two are net exporters of farm goods), but higher than in other East European countries. Outside the Communist orbit, very few countries have a higher fertilizer consumption rate. Comparing this continuing increase in fertilizer consumption in the Soviet Union with the sluggish performance of most crops, it is clear that the rate of return for additional fertilizers must be very low.

Recently we have been told that from the eleventh plan (1981–1985) and until 1990, the grain crops' share in chemical fertilizers should increase from 7.7 million tons annually to 16.6 million, which would equal the whole increment in fertilizer use intended for those years.⁹ This increase in *khimizatsiya* has been hailed as a leading part of a purported technological revolution in grain production and an example of "intensive technology."

Machinery numbers and capacity have also been on the increase. Tractors are increasing by about one-tenth every five years—that refers to the stock at the end of each year, which is now approaching 3 million. The supply of new tractors every five years equals more than half the year-end inventory, and the scrapping in five years exceeds three-fourths of the new supplies in five years. There is no sign that these trends

are relenting. The picture is similar in the case of grain combines and farm trucks. For tractors, there is also data on aggregate horsepower, which increases faster than the number—the average unit is getting heavier so the numbers understate the growth of the fleet.

Another feature of increasing capital intensity is land melioration, mainly new irrigation and drainage projects. These are in favor despite their relatively low payoff to investment because they afford increased security of crops (lessened variation of yields). In the current five year plan, such improvements should exceed those in the previous plan period by 46 percent.¹⁰

Data for total capital formation in agriculture, in "comparable" prices, show this to be 26 percent of all capital formation in the country in 1985. The same proportion has oscillated between 26 and 27 percent since 1971. Back in the 1960's it was somewhat smaller (20–24 percent). The large share of agriculture in the national economy is underscored, and the share in consumer goods production must be even larger. Engels's Law, which states that food expenditures increase more slowly than other consumer expenditures, does not seem to operate in the Soviet Union.

Any signs of increasing efficiency in the agricultural system are at best very weak. Nonetheless, the kind of upturn that happened in 1985–1986 has been interpreted as the first result of a policy of improving management, as a means of getting more out of the resources.

Apparently, the weather of 1986 was unexceptional, so the return to higher grain yields should reflect something else, which could be better management. As regards weather, it is not certain that the usual macro data are adequate to forecast moderate yield variations. The increased fertilizer supply might serve as a partial substitute for water. References to "intensive technology" are quoted from authoritative sources as reflecting both the intentions of the regime and some putative results.¹¹ Increasing capital intensity is, of course, only a partial substitute for better management, rather than part of it.

On the organizational level, the new management initiatives take a form that was anticipated long ago but always had difficulty getting off the ground. The mechanized link (*zveno*) had been tried as an experi-

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Folke Dovring, a former United Nations official, has written 12 books, including *Riches to Rags* (Cambridge, Mass.: Schenkman, 1984), *Land Economics* (Boston, Mass.: Breton, 1987), and *Productivity and Value* (New York: Praeger, 1987), and many articles on land reform, income distribution, development dynamics and energy. One of his articles has appeared in *Voprosy ekonomiki*, the economics journal of the Soviet Academy of Sciences.

⁹Zholobov, op. cit.

¹⁰V. Brichko, "Povyshenie plodorodiya zemli i ustoychivost' proizvodstva produktov rastenievodstva," *Planovoe khozyaystvo*, no. 2 (February, 1987), pp. 90–93.

¹¹Ken Gray, "Soviet Agricultural Performance in 1986 and Prospective Reforms," paper given at the AAASS meeting in New Orleans, November, 1986, as reported in an abstract by the author in the *Newsletter for RSEE*, vol. 9, no. 1 (March, 1987), pp. 3–4.

"Afghanistan looms large in Gorbachev's drive for glasnost. If his internal reforms are to succeed, Gorbachev must find a way out of the expensive war in Afghanistan."

The Soviet Union and Afghanistan in 1987

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THE past two years have witnessed a series of stunning political, diplomatic and military events inside and outside Afghanistan. The government of the Democratic Republic of Afghanistan has launched a major attempt at "National Reconciliation." The refugees have been invited to return with complete amnesty, and the resistance fighters have been encouraged to lay down their arms. Only those who have committed "crimes" against the "people" are to be held accountable by the government. On January 15, 1987, Mohammad Najib, General Secretary of the People's Democratic party of Afghanistan (PDPA), announced a unilateral cease-fire, but as a joint Soviet-Afghan offensive was already under way in Kandahar, the proposal became academic.¹ The *mujahidin* (resistance fighters) rejected the offer.

On June 28, Najib announced that the Democratic Republic of Afghanistan would henceforth be called the Republic of Afghanistan (RA), the name given to the country after the overthrow of the monarchy by Mohammad Daoud in 1973.²

General Secretary Najib indicated that a new constitution was nearing completion, which would permit political parties to function if they supported the Afghan peace efforts, vowed friendship with the Soviet Union and agreed to operate under the framework of the National Fatherland Front (NFF), an organization created to combat anti-Afghan Republic elements and support the government.

While the leadership of the PDPA attempted to broaden its fragile base of power, the introduction of hand-held, shoulder-fired ground-to-air missiles (American Stingers and British Blowpipes) changed the complexion of the war in Afghanistan.

Soviet-RA troops launched a major offensive in the

Jaji area of Paktya Province from May 23 to June 18, 1987, the largest operation to date in the south.

The objective of the offensive was to establish additional outposts in the area to interdict mujahidin supplies and to destroy as many resistance groups as possible. The offensive failed, partly because the Stingers shot down about a dozen aircraft (according to reliable mujahidin sources).

POLITICAL UNITY

Foreign correspondents, diplomatic observers, and some scholars bemoan the lack of unity among the seven major political factions in Peshawar. The seven major parties are Hizb-i-Islami (Islamic party), led by Gulbuddin Hekmatyar, pragmatic, opportunistic, revolutionary, mainly Pushtun; Jamiat Islami (Islamic Society), led by Burhanuddin Rabani, revolutionary Islam, both non-Pushtun (dominant) and Pushtun, spread throughout the country; Jabhai-yi-Nijat Melli (National Liberation Front), led by Sigbratullah Mojadidi, Naosbandi Sufi, traditionalist, promonarchy, strong in the south and east (Kandahar, Kunar, Logar); Islami Melli Mahaz (National Islamic Front), led by Pir Sayyid Ahmad Gailani, Qaderiya Sufi, modernist, moderate, promonarchy, mainly Pushtun in the south and east (Paktya, Paktika, Ningrahar, Ghazni, Wardak); Harakat-i-Inqelab-i-Islami (Islamic Revolutionary Movement), led by Maulawi Mohammad Mohammadi, mildly revolutionary, strongest in the southwest and west; Itihad-i-Islam-Baray Azadi Afghanistan (Islamic Alliance to Liberate Afghanistan), led by Abdul Rasul Sayyaf, traditionalist, links with Saudi Wahabis; and Ikhwan Mussalma-in (Muslim Brotherhood), popular among religious scholars, mullahs, and villagers in the south and east. Many other small groups exist, including a break-away group within Hizb-i-Islami.³

However, unity between ethnolinguistic groups has never been a strong pattern in Afghan culture and history. The basic Afghan sociopolitical institutions have been based on tribal (primarily territorial) lineage, within segmentary kinship structures.

Earlier attempts to achieve unity among the seven major Peshawar groups ended in failure. However, pressure from Pakistan and other supporters of the mujahidin (including the United States), and growing

¹His original name, Najibullah (noble man of God) was changed because of its religious connotation. Najib replaced Babrak Karmal as General Secretary of the People's Democratic party of Afghanistan (PDPA) on May 4, 1986.

²Henry Bradsher, *Afghanistan and the Soviet Union* (Durham: Duke University Press, 1986); Louis Dupree, "Red Flag over the Hindu Kush," *American Universities Field Staff Reports, Asia* (Hanover, N.H.: AUFS Press, 1979-1980).

³David Isbey and Ron Volstad, *Russia's War in Afghanistan* (London: Osprey Publishing, 1986); Olivier Roy, *Islamic Resistance in Afghanistan* (Cambridge: Cambridge University Press, 1986).

dissatisfaction among internal mujahidin commanders forced the seven to unite in May, 1985, as the *Islami-Ittihad-i-Afghanistan Mujahidin* (Islamic Unity of Afghan Mujahidin, IUAM), commonly called the "Unity." Although the leaders of the seven groups are still not reconciled, the Unity has stuck together loosely in spite of policy differences and personality clashes.

The chairmanship of the Unity rotates every three months, and the seven leaders form a deliberative, consultative body. This pattern is well within normal Afghan rural political institutions. Called by different names in different regions, village councils are the backbone of the political structure in the countryside.

Occasionally, a charismatic figure becomes the temporary dominant force in a village council, but normally group leadership prevails. The similarities between the traditional village council and the Unity are self-evident and have important implications. Although the groups may not like each other, they are learning to tolerate each other. Until now, the leaders of the seven parties in the Unity have performed valuable functions: presenting a face to the outside world; disseminating information about the war to interested parties; and acting as a conduit for weapons and supplies to mujahidin inside Afghanistan. Nonetheless, the mujahidin commanders are becoming more and more dissatisfied with the actions of the Unity, because some leaders in Peshawar (and elsewhere) are using their positions to gain personal power, publicity and petrodollars, as well as Pakistani support.

A steady evolution toward regional alignments has occurred inside Afghanistan. Regional commanders (some of them former enemies, who fought each other after the Soviet invasion) are beginning to consolidate their positions, and the superior commanders (as identified by the mujahidin themselves) are currently engaged in overseeing the formation of larger zones of influence—first emphasizing communication, then coordination, and lastly genuine cooperation.

For example, Ahmad Shah Masood, a member of the *Jamiat Islami* and the leader of the Tajik and others in the Panjsher Valley northeast of Kabul, has been able to organize the mujahidin of the ten northeastern provinces.⁴ Because of this, it may become possible to ship arms, food, medicines and cash directly to the newly organized northeastern front, instead of going through the middlemen in Peshawar or Quetta. Another front, under Commander Ismail Khan (*Jamiat Islami*), plans to form a similar front among the nine provinces of the west and northwest. In all probability, Afghanistan will soon be divided into six or seven regions, with independent commanders, who will communicate and cooperate with each other, and coordinate military tactics and logistics.

⁴Edward Giradet, *Afghanistan: The Soviet War* (New York and London: St. Martin's Press, 1986).

THE REFUGEES

Of the world's 12 million refugees, about 6 million are Afghan: 3 million are in Pakistan, and 1.5–2 million are in Iran. Others are scattered through India, West Europe, North America and Australia. The total population of Afghanistan in 1978 was approximately 15.5 million.

Little is known about Afghans in Iran; however, a great deal is known about the refugees in Pakistan, the world's largest single refugee population, and refugees still flee from Afghanistan into Pakistan every month. Thus far, the important aspects of the Afghans in Pakistan have been negative (which partly accounts for meager media coverage). There has been no starvation, no epidemics and (until recently) no major outbreaks of violence involving refugees and local Pakistanis. There was an increase in indiscriminate bomb blasts in Pakistan in 1987, probably through the machinations of KHAD, the Afghan secret police. Because of this, tension between refugees and local residents have increased.

Given the opportunity, will the refugees go home? The answer for the overwhelming majority in the refugee camps is "yes." However, many Western-educated, Western-oriented and Western-reacting Afghans have found their way to the West (West Europe and North America) with their families. They will probably not fit into whatever the future holds for Afghanistan.

It is impossible not to mention Pakistan when discussing any aspect of the current Afghan situation, since Pakistan has received the bulk of the refugees. Fortunately, by the time the massive refugee flow began in early 1980, the government of Pakistan had already created the Chief Commissionerate for Afghan Refugees (CCAR) in Islamabad, with suboffices in Peshawar, the North-West Frontier Province and Quetta, Baluchistan. A new government institution had been created, which ultimately absorbed over 10,000 Pakistani bureaucrats, many of whom would otherwise have been unemployed.

Other institutions have aided the refugees on a large scale. The United Nations High Commission for Refugees (UNHCR) is a major contributor (collecting from donor nations) and coordinator. The United Nations World Food Program (WFP) monitors the distribution of food supplies. Many volunteer agencies (upward of 60) assist in many areas: hospitals and clinics (in refugee camps and across the border); education; and income-generating projects (handicrafts), among others. The World Bank oversees three major projects designed to help the refugees temporarily and to aid the Pakistanis after the refugees depart: reforestation (necessary because 3 million Afghan sheep and goats and other livestock traveled with the refugees); road construction and repair; and water table restoration, because 3 million refugees and 3 million

livestock have affected the water systems.

A potentially volatile development has been politicizing the Afghan issue within Pakistan. In varying degrees of intensity, the 11 parties of the Movement for the Restoration of Democracy (MRD) and independent opposition parties insist that the government of Pakistan enter into direct negotiations with the Republic of Afghanistan, which the opposition hopes will permit the refugees to return home (almost all the ills of Pakistan are now blamed on the Afghans). A favorite gambit of these parties is to state a problem and add "... because of the Afghans."

Soviet and Afghan disinformation programs continue to sow dissension between refugee groups, between refugees and Pakistanis, and between Pakistanis themselves. Active Afghan KHAD agents not only spread disinformation, but set off bomb blasts as far south as Lahore. A number of terrorists have been apprehended by Pakistani security forces. Meanwhile, the refugee flow continues, fluctuating with the intensity of the fighting in any given area.

THE SOVIET UNION

The Soviet Union has been fighting in Afghanistan longer than it fought in World War II, and with no light at the end of the Salang tunnel, a major artery from north to south in Afghanistan. But the light may be coming. General Secretary Mikhail Gorbachev set the tone when he referred to Afghanistan as the Soviet Union's "bleeding wound."

Afghanistan looms large in Gorbachev's drive for glasnost. If his internal reforms are to succeed, Gorbachev must find a way out of the expensive war in Afghanistan, which has lasted almost eight years. Estimates of the numbers of Soviet soldiers killed in action vary from 10,000 to 30,000. The number has been increasing in the past three years, as Soviet troops have engaged in more direct combat roles, and the foreign weapons supplied to the rebels have caused considerable attrition.

More important, about 500,000 Soviet veterans of the Afghan war have returned home; and their stories, like those of America's Vietnam war veterans, deal with the horrors of war, and not with the proud fulfillment of their "international socialist duty." An estimated 50 percent of the returned veterans have used drugs. Evidence accumulates that resistance to the war is growing in the Soviet Union.⁵

THE FUTURE

Diplomatic pressures have remained relatively constant over the past seven and a half years. The United Nations General Assembly, the Non-Aligned Move-

ment (NAM), the Organization of Islamic Conference (OIC), the North Atlantic Treaty Organization (NATO), and the Association of South East Asian Nations (ASEAN) have all consistently called for the withdrawal of "foreign" troops from the territory of Afghanistan.

Individual nations, including several in the East European bloc, have also condemned the invasion, with different levels of intensity and specificity. A number of Communist parties (Italian, Spanish, British, Japanese) have obliquely expressed concern. Diplomatic pressure may have been partly responsible for the recent Soviet peace nibbles. But attrition, combined with diplomatic pressure and the new policies of General Secretary Gorbachev, may bring an end to the war.

No matter what happens, struggles for power will probably break out after the Soviet departure, as the Afghan resistance fighters establish regional political pecking orders. Any government left behind by the Soviet Union will have a short survival quotient, but any single mujahidin group attempting to establish itself in Kabul (the capital) while the regional power struggles are under way will be ousted by regional coalitions.

When the regional conflict has settled, the regional leadership can convene in Kabul to determine which type of government and which leaders will rule in postwar Afghanistan.

In foreign policy, the Afghans will return to their pre-1979 stance of *bi-tarafi*, "without sides," and their new system of government may be a federal republic, with provinces based on several characteristics: major ethnolinguistic distributions, combined with river patterns, lines of communications and commerce, potential regional development, and so forth. Approximately, seven regions in Afghanistan meet the criteria. (Incidentally, the seven generally coincide with the seven Soviet military zones.)

But what will happen if Afghanistan is deserted by those who are now helping it, and the country does finally become a Soviet satellite? Quite possibly, if the Soviet Union is not back across the Soviet-Afghan border by the year 2000, and given the current instability among the various ethnolinguistic units in the region, the Soviet Union could become the dominant foreign economic and political influence in South and Southwest Asia, without a single Soviet footprint out of Afghanistan. ■

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⁵Taras Kuzio, "Opposition to the Occupation of Afghanistan," *Central Asian Survey*, vol. 6, no. 1 (1987), pp. 99-118.

MILITARY POWER

(Continued from page 316)

Forces in East Europe and western Russia that worries Western analysts when they are faced with a prospective on theater nuclear systems. In justifying NATO's reliance on nuclear response, Westerners cite the Soviet Union's vast stockpiles of weapons. But however impressive, raw figures only become ominous when placed in the context of the recent Soviet discussions, which have confirmed the role of combined-arms formations, reinforced the mutual emphases placed on mobility, speed and surprise, and recognized fully the logistical problems of ensuring "sustainability" (*zhivuchest*), as well as the need for vastly improved command/control/communications and intelligence capabilities (C³I).

These doctrinal criteria explain recent developments that have brought TVD's, Army Aviation, the greater use of air mobile and *spetsnach* units, and the celebrated "operational maneuver group" or OMG. Many analysts believe that at the Front or Army level, independent tank brigades or one of the new corps could serve as an OMG. This would act as an autonomous and roving "forward detachment" to wage the "deep battle" envisaged in Ogarkov's strategic operations.

The same imperatives are evident in the improved striking power given the Ground Forces' first echelon in Central Europe. Front-line divisions have often received significant increases in every important category of weaponry (tanks, artillery and missiles). Meanwhile, much of the Soviet and Warsaw Pact's artillery now is self-propelled, and all its new weapons may be dual-capable.

The presence of 152mm weapons and BM-27 MTL's have extended the range of a Soviet conventional bombardment to some 19 miles (30 km).¹⁴ Armored forces also have been improved as an increasing number of combat vehicles enter service. More important than the vehicles themselves are their improved armaments and protection. By 1987, both the T-64B and T-80 combat vehicles were firing the AT-8 *Kobra* laser-guided, antitank missile. Further, the T-72's and T-80's were reportedly equipped with an Israeli style of reactive armor that American Army officials warned would negate the value of most of NATO's (the North Atlantic Treaty Organization's) stock of AT weapons. American officials also claimed that the Ground Forces' potential soon would grow even stronger with the introduction of the ZSU-X self-propelled anti-aircraft

gun system, the SA-12 and SA-14 SAM systems, and a series of new helicopters.

The overall manpower of the Soviet Armed Forces rose sharply in the early 1980's (according to the IISS, from 3,705,000 in 1982 to 5,300,000 in 1983), while army divisions leapt from 194 to 206.

ANALYZING THE CONVENTIONAL THREAT

Those who were alarmed by the conventional threat to NATO in the mid-1970's are therefore even more concerned at present. The standard Western wisdom holds that given the overwhelming conventional superiority of the Warsaw Pact (WTO) on the ground, NATO must retain its nuclear capabilities.¹⁵

While figures on manpower seem to justify the alarmists' warnings, a number of considerations undermine their apparent validity. Whereas the WTO figures include *all* troops west of the Urals, those for NATO *exclude* France's 10 divisions and 1,300 tanks, as well as the Spanish forces. And while the Romanian forces are banned by law from fighting beyond that state's borders, it is hard to imagine a Soviet drive through Europe not involving war with France.¹⁶ Further, the figures suggest that all other non-Soviet WTO divisions are reliable and available for battle—a contention many analysts would challenge. Third, the status even of Soviet divisions may vary widely, and so affect the time it takes to reinforce any WTO offensive.

In the past, Soviet units have been divided into three categories of readiness. The first, considered to have full equipment and personnel, is on 24-hour notice. This category includes the 31 divisions of the 4 Groups of Soviet Forces in East Europe, the 7 airborne divisions and the 10 air assault brigades. Those in category two have a full complement of fighting vehicles, but only 50 to 75 percent of their strength. The Soviet leaders hope that these units can be manned fully with reservists within three days, and that they can be operational within 30 days. As for category three divisions, although they may have full combat equipment, much of it may be obsolescent, and they are served only by cadres (20 percent). Soviet leaders could have these fully manned in eight to nine weeks, with an estimated 2,100,000 reservists being required to bring the category two and three units up to strength. Of the divisions stationed in the western Soviet Union, 15 of 65 may be in categories one and two. The other 50, as well as 60 percent of the 148 stationed elsewhere in the Soviet Union, are category three. But the system may be being altered to leave only some subunits of a division at cadre level and other subunits at full strength. Recognizing that a future conflict may well be protracted, Moscow's planners seem to be forming "second generation" divisions as well. Using old equipment and key personnel from active units, these formations will be filled out with older reservists who

¹⁴These increases in the strength of ground units are conveniently summed up in John Thompson, "The Operational Manoeuvre Group," *Strategic Datalink* (Toronto: Canadian Institute of Strategic Studies, 1986), p. 2.

¹⁵Figures given in *Soviet Military Power*, pp. 92-93.

¹⁶*Ibid.*

are to be mobilized and retrained over a period of several months. By late 1986, there were reportedly 13 such divisional entities. As for the other WTO divisions, only the six East German and a handful of Polish and Czech units could probably be included in the first echelon of a thrust westward.¹⁷

The alarming increases in divisional capabilities noted above mainly concern the category one divisions, and possibly only those in East Europe. Even reinforced in that manner, these divisions still are smaller than many of their Western counterparts. Thus a front-line Soviet tank division's 11,500 men, 328 main battle tanks and 150 APC's would face the 18,000 men, 324 tanks and 450 APC's in its American counterpart.¹⁸ Considering all these factors, as well as the comparatively poor state of land travel in western Russia and East Europe, some analysts are more optimistic about NATO's position on the Central European Front.

More threatening still to Moscow is the promise of an "emerging technology" system like the Assault Breaker missile. When operating in connection with "real time" surveillance systems like the American Pave Mover radars, precision-guided submunitions—whose destructive power approaches that of low-yield nuclear munitions—could be launched by missiles and aircraft at troop concentrations deep inside the WTO's rear. Soviet planners thus must wonder whether their modernized tanks and APC's, their increases of 1,000 tubes in divisional artillery strength, and their promotion of a six-division East German army are enough to maintain the balance. This consideration makes it highly likely that the motive for Brezhnev's withdrawal of the 6th Guards Tank Division from Germany in 1980 was purely political, as will be any reductions under Gorbachev.¹⁹

Even so, Soviet military leaders may hope that if a conflict is deemed necessary, the acquisition of strategic, operational and tactical surprise might bring a rapid victory. Yet the conditions under which they

would take this gamble are difficult to imagine, and those that would give them these advantages even more so. Moscow, therefore, has little choice but to agree with the IISS's conclusion that "the conventional balance is still such as to make general military aggression a high risk undertaking for either side."²⁰

OTHER CONSTRAINTS

The performance of any state's armed forces must depend on the quality as well as the quantity of personnel and equipment. With regard to quality, there is good reason to question whether many front-line Soviet conscripts have the skills or the desire to handle their modern weapons. This is not to say that they would not fight bravely in defense of the Motherland, especially against an invader. Rather, it is to suggest that educational levels are often lower than the authorities would wish, that military service is far from popular, that the preconscript training given draftees is at best of limited value, that past patterns of corruption and inefficiency still exist, that the value of 80 percent of the reservists (that is, those who have not served in five years) is very dubious, and so on.²¹

The Soviet armed forces, as a whole, continue to be hampered by shortages of long-service officers and noncommissioned (NCO) ranks, the backbone of any mass army based on a cadre system. This means that despite a good professional education in the extensive network of Soviet military schools and 17 academies, Soviet officers frequently waste their time in tasks undertaken elsewhere by NCO's.²² Another major problem is posed by the demographic trends noted above. While the U.S.S.R.'s military manpower has expanded from 3,305,000 in 1970 to 5,130,000 in 1986, such gross numbers contain growing numbers of non-Slavs.

According to one estimate, the percentage of non-Russian recruits will rise from 51.7 in 1980 to 74.7 in the year 2000. This problem is complicated by the lower educational levels of non-Russian and non-Slavic recruits at a time when Russian designers seem to be moving from technically simple but reliable weapons to more complicated and sophisticated systems, the maintenance of which is more difficult. As a result of both trends, the new tanks and aircraft have lower readiness levels than Western models while still remaining technologically inferior.

Russia's armed forces always have served as an instrument of national integration for the indoctrination and assimilation of non-Russians, and especially of non-Slavs.²³ But despite imposing limits on exemptions from conscription, the Kremlin still has to deal with a decreasing pool of skilled young men for use in the military and industry. Further, given the economy's overall stagnation, there are no easy answers. Ogarkov's own lateral promotion to the post

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¹⁷On Soviet divisional strengths see *The Military Balance, 1986-1987*, p. 37. The problem of the WTO is discussed in numerous studies, but most extensively in Teresa Rakowska-Harmstone et al., *Warsaw Pact: The Question of Cohesion*, 4 vols., Canadian DND ORAE Extra-Mural Papers Nos. 19, 29, 33 and 39 (Ottawa: Department of National Defense, 1981-1986).

¹⁸*The Military Balance, 1986-1987*, p. 8.

¹⁹Mark Urban, "Red Star Over Germany—II," *Armed Forces* (February, 1985), pp. 71-73.

²⁰*The Military Balance, 1986-1987*, p. 225.

²¹Jones, "Military Organization," pp. 95-96, 109-110. Also see Mikhail Tsyarkin, "The Conscripts," in Cracraft, op. cit., pp. 65-80.

²²Herbert Goldhamer, *The Soviet Soldier: Soviet Military Management at the Troop Level* (London: Lee Cooper, 1975), pp. 10-14; Cockburn, op. cit., pp. 41, 52-54.

²³Gregory L. Lathrop, "The Soviet Military as a National University," *SAFRA* 5 (1981), pp. 295-316.

GORBACHEV AND THE REFORM MOVEMENT

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June, 1987, Central Committee speech by passing around letters from workers, thus introducing an unprecedented whiff of popular pressure into Central Committee deliberations.

The warning given in these letters is that people are still not seeing any concrete changes in their daily life as a result of the perestroika. Gorbachev must find some way of making these improvements quickly, even while the economy is undergoing a structural overhaul. One method is to allow private enterprise in the form of individual services and small cooperatives. Gorbachev told the assembled party officials to stop arguing about whether these forms of enterprise are sufficiently socialist and to start using them to make immediate improvements in people's lives.

Gorbachev's speech also devoted much attention to the traditional disaster areas of the Soviet economy: housing, services, food supply and retail trade. The past has bequeathed Gorbachev an opportunity here; performance in these areas has been so poor that visible improvements can be made without major investment. Gorbachev was bold enough to make an explicit promise of a sharp improvement in the food-supply situation in the next two or three years.

Gorbachev has been compared to several leaders from the Soviet Union's past: Khrushchev with his populism and his call for "trust in people," Stalin with his transforming urgency, Lenin with his emphasis in his final writings on persuasion and reform. A comparison can also be made with the Czarist statesman Pyotr Stolypin. In the decade before the Russian Revolution of 1917, Stolypin initiated a program intended to transform the peasant village. He wanted to move away from the collectivist mores of the peasant commune and create a class of self-reliant farmers. Stolypin said he was making a "wager on the strong"—just as Gorbachev is making his basic appeal to the ambitious and enterprising who want to apply their talents and succeed. But the paradox was that the Stolypin program often had to be forced down the peasants' throats and that hardy individualists had to be created by government fiat. The Stolypin program was not successful in staving off the collapse of Czarism.

Gorbachev is playing for similarly high stakes. His ultimate pressure is the lack of any alternative. If the reform movement fails—then, as Gorbachev has said, the last reserves of trust and commitment will have been exhausted and any further campaigns will be useless exercises in mutual deception. If it succeeds, the Soviet people and the whole world will benefit from the liberated energies of a country kept back from its potential greatness by an exceptionally difficult history. ■

SOVIET POLICY IN EAST ASIA

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seems ready to accept a slower rate of improvement in relations. . . ."¹⁸

Finally, to be factored into any calculations in the Kremlin of the advantages to a settlement (as opposed to the maintenance of the status quo) is the fact that there are no guarantees for Moscow that a different policy would bring the desired results. First, it may be true that, as former Deputy Foreign Minister Mikhail Kapitsa (now head of the Institute of Oriental Studies of the U.S.S.R. Academy of Sciences in Moscow) said in Bangkok early in 1985, Moscow's "ability to influence Vietnam" should not be overestimated.¹⁹ Given Hanoi's historical sensitivity to its independence and the apparently high priority it attaches to Kampuchea, the Soviet Union would probably have to go to extreme lengths to force a change in Vietnamese policy. Second, there is no certainty that Soviet-ASEAN—or Sino-Soviet—relations would improve if the Indochina barrier disappeared. After all, Soviet ties with the ASEAN states were not much stronger in 1979, after a decade of Moscow's efforts, than they had been in 1969. Even in the 1980's, Soviet irrelevance to the calculations of many Southeast Asian elites seems striking. The lack of a Soviet role in recent events in the Philippines is only the most obvious example.

JAPAN

Moscow's relations with Tokyo have been strained for decades, and until the advent of Gorbachev had shown no signs of improvement. The major factor in what had become a deteriorating relationship in the 1970's was Japan's claim to sovereignty over the Northern Territories, four islands and island-groups held by the Soviet Union. As Japan's insistence on the islands has escalated, Tokyo has come to see this single issue as the test of Soviet intentions toward Japan. For its part, Moscow has rejected Japanese claims outright and has been making increased use of the islands in its naval strategy in the Pacific. (Moscow has deployed a division of ground forces, about 40 MiG-23's and, according to some reports, cruise missiles to the islands.) One crucial effect of these developments from Moscow's perspective has been to increase the pressures within Japan for a further expansion of its own military capabilities, as well as closer military ties with the United States. Both of these effects are seen by Moscow as inimical to Soviet interests.

¹⁸Sophie Quinn-Judge, "Moscow on the Move," *ibid.*, June 4, 1987, p. 10.

¹⁹*The New York Times*, April 8, 1985. This assessment was recently reiterated by Indonesian Foreign Minister Mochtar Kusumaatmadja; *The New York Times*, June 17, 1987.

There have been a number of signs since Gorbachev's succession that Soviet foreign policy planners have recognized the counterproductive nature of their approach to Japan. The most significant sign was Shevardnadze's January, 1986, visit to Tokyo.²⁰ The foreign minister, as he was to do on his Southeast Asian swing a year later, made every effort to convey an impression of flexibility and goodwill. He was far more accommodating than the rigid former foreign minister, Andrei Gromyko, who had last visited Japan more than 10 years earlier. The two sides decided to regularize foreign minister meetings on an annual basis and sought to exchange visits between Gorbachev and Prime Minister Yasuhiro Nakasone. They also agreed to renew negotiations on a peace treaty and Japan consented to end the sanctions imposed on Moscow in response to its invasion of Afghanistan. Japanese officials were even convinced that "the Soviet Union has changed its position" on the territorial issue, since Shevardnadze was willing to argue the Soviet case for three hours with Japanese Foreign Minister Shintaro Abe (Gromyko had always simply changed the subject) and also agreed "to negotiate the unresolved questions," in the joint statement. In the words of one Tokyo official, "In the past the Soviet side even refused to sit at the negotiating table but now they will negotiate without altering their formal position." Nevertheless, Shevardnadze did not budge on the substance of the territorial dispute, maintaining that there was no issue in the first place.

Gorbachev's remarks on Japan in Vladivostok six months later represented a similar attempt to create the impression of change in relations without making any concession on matters of substance. Japan was second in emphasis only to China; it was singled out as a "power of supreme significance" and its nonnuclear policy was assessed positively. Not only was there no hint of any substantive change on the islands, however, but Gorbachev called for "profound cooperation on a sound realistic basis, *in a calm atmosphere free from problems of the past*" (emphasis added).

This new but qualified Soviet approach to Japan continued into mid-1987. Despite some harsher rhetoric from Moscow late last year and the postponement of Gorbachev's tentatively planned January visit, Moscow's diplomacy has generally maintained its more vigorous and conciliatory tone. There has been substantial debate in Japan about the significance of this change in the Soviet approach but generally the Japanese have been skeptical regarding a real shift in Soviet

policy. In particular, this has been due to Moscow's continued intransigence, now maintained with a smile, on the Northern Territories.²¹ Relations are certainly less strained than they were under Gorbachev's predecessors, but the improvements have been limited and there is a prevailing "wait and see" attitude among the Japanese.

VLADIVOSTOK AND THE SOVIET FUTURE IN EAST ASIA

The substantial Soviet military buildup in the Far East in the 1970's and early 1980's has had contradictory effects on Soviet security and foreign policy interests.²² It has provided the Soviet Union with a presence and important capabilities, as well as credentials as a regional actor. On the other hand, it has heightened suspicions about Soviet intentions and its legitimate regional role. Specifically, the Soviet buildup has provoked an American counterbuildup, closer Sino-American-ASEAN cooperation, increased Japanese attention to its own defense capabilities, closer United States-Japanese cooperation, and increased collaboration between those two powers and China.

The Gorbachev "offensive," expressed explicitly and comprehensively in Vladivostok, represents a Soviet attempt to reverse these developments, which run contrary to Moscow's interests in East Asia, and establish a role not based solely on the military instrument of power. Gorbachev's approach is specifically aimed, first, at projecting a far more vigorous Soviet diplomacy in the region. The implementation of this objective is seen in Gorbachev's proposal for an Asian Helsinki conference and in Shevardnadze's visits to Japan and Southeast Asia, among a host of diplomatic exchanges in the past two years. Second, the new leadership seeks to foster an image of a conciliatory Soviet Union in East Asia. Moscow has made concessions on two of China's three obstacles, ranging from meaningless in Afghanistan to real in Mongolia, and has also reopened negotiations on the border. Moreover, the Kremlin has shown a new willingness to discuss issues that it had previously refused even to recognize, including Kampuchea and the Northern Territories. Although there have been no Soviet concessions on either of these issues, perceived as crucial by Beijing and ASEAN and by Tokyo, respectively, the mere fact that Moscow has allowed them to be placed on the table at all may be of significance in the longer run.

Finally, increased trade and economic exchange have been pushed with virtually all East Asian countries, from China and Japan through ASEAN, as have cultural contacts. Progress in this effort to reduce the widely held perception of a Soviet threat and to gain acceptance as a natural and legitimate participant in the region's affairs would serve Soviet foreign policy interests and the Gorbachev regime's domestic eco-

²⁰See Richard Nations, "The Russian Evolution," *FEER*, January 30, 1986, pp. 26-27.

²¹For a recent reiteration of the Soviet position, again in a softer mode, see *Pravda* chief editor Viktor Afanasyev's interview in *Asahi Shimbun*, March 31, 1987.

²²See Richard H. Solomon and Masataka Kosaka, eds., *The Soviet Far East Military Buildup, Nuclear Dilemmas and Asian Security* (Dover, Mass.: Auburn House, 1986).

conomic agenda by diminishing the anti-Soviet unity of Moscow's adversaries and by enhancing the prospects for accelerated economic development of the Soviet Far East, through greater cooperation with the relatively thriving economies of East Asia.

Numerous questions remain. It is unclear, for example, precisely what significance recent changes in Soviet policy-making personnel and structure will have for Soviet policy in East Asia.

The most basic of these changes was Gromyko's replacement as foreign minister by Shevardnadze; that change has already affected Soviet relations with Japan and perhaps with Southeast Asia as well. Kapitsa has been perceived as rigid on China and as arrogant by the Southeast Asians and he has been removed from the Foreign Ministry. There were indications that Yevgeniy Primakov, appointed director of the Institute of World Economy and International Relations and considered close to Gorbachev, would become responsible for Moscow's Japan policy. Ambassadors to the key countries in the region—including China, Japan, Vietnam, and Indonesia—were changed, as were key members of the international department of the Central Committee.

In addition, there was a major reorganization of the Ministry of Foreign Affairs in the first half of 1986. The old arrangement of a First Far Eastern Department (China, MPR, North Korea), Second Far Eastern Department (Japan, Indonesia, the Philippines), Southeast Asian Department (the three Indochina states plus Thailand, Malaysia and Singapore), and Second European Department (Australia and New Zealand grouped with England, Ireland, and Canada) was replaced by an Asian Socialist Countries Directorate (China, MPR, North Korea, and the three states of Indochina), Southeast Asian Directorate (the six ASEAN countries), and Pacific Cooperation Directorate (Japan, Australia, New Zealand, and the South Pacific countries).

It is difficult to predict how much further Moscow may go in the way of the concessions offered at Vladivostok. It is not yet known whether the Kremlin's willingness to recognize the relevance of the Kampuchean issue to China and the islands issue to Japan is as far as Soviet leaders will go or if it is the beginning of a gradual negotiation process. Moreover, it is impossible to know with certainty what degree of consensus exists in Moscow on East Asian policy. Given the evidence of differences within the Soviet elite on Gorbachev's domestic agenda, no unitary or rational actor model should be assumed for any aspect of Soviet foreign policy.

²³For example, see D. Petrov, "Imperialism Forms New Blocs in the Asian Pacific Region," *Far Eastern Affairs*, vol. 1 (1987), pp. 70–80.

²⁴Radio Moscow in Mandarin to China, January 23, 1987; in FBIS-SU, February 4, 1987.

A question of particular significance is what does this change in Soviet East Asian policy mean for the United States? Since this new Gorbachev line has been expounded, two tentative and contradictory conclusions can be drawn. First, Gorbachev recognized in his remarks at Vladivostok that the United States was "a great Pacific power" and that without United States participation it would be "impossible to resolve the problem of security and cooperation in the Pacific Ocean in a way that would satisfy all." Gorbachev again appeared to be realistic, reasonable and conciliatory. It should be noted, however, that the focus of that speech and indeed Gorbachev's Asian policy from the beginning has been on the East-West struggle in Asia, whereas Moscow's former major concern in Asia had been China. Unlike Brezhnev's Asian collective security proposal of 1969, which was an attempt to contain China, the focus in Gorbachev's scenario is on the military collusion among the United States, Japan and South Korea and their efforts to drag in other states, particularly those in ASEAN.²³ Moscow emphasizes American pressures on China and even the American "military threat" to China.²⁴ The thrust of Vladivostok, then, is that the Soviet Union is part of the Asia-Pacific region in that it seeks to resolve the conflicts while, "regrettably," the United States "is not even thinking of a serious talk on the Pacific subject."

What this contradiction will mean for the evolution of United States-Soviet relations in Asia is not clear. What this relationship ought to be may not yet be agreed on in Moscow or in Washington. Indeed, there is no clear consensus in the United States as to a legitimate Soviet role and policy in Asia. There are risks and uncertainties for the United States in the Gorbachev approach, particularly in terms of declining unity among Soviet adversaries. Yet this and other dangers would seem to be counterbalanced and even outweighed by the likelihood of limited Soviet rapprochement with China, ASEAN, and Japan, and by the possible gains for United States interests of a more stable and less militarized environment in East Asia. This could lead to a situation in which the Soviet Union had an economic, political and security stake in the maintenance of this stable and more secure environment. This would seem to serve American foreign policy interests as well. ■

SOVIET AGRICULTURE

(Continued from page 332)

ment in decentralized decision making around 1960 and seemed to work well. It was halted by party authorities, who denounced it as not sufficiently socialist.¹² The same concept was heard now and again,

¹²Folke Dovring, "Soviet Farm Mechanization in Perspective," *Slavic Review*, vol. 25, no. 2 (June, 1986), pp. 287–302.

and in the early 1980's it appeared to have gained an increased following. From the press debate of 1982, an expression approaching a slogan was, "the link is the master of the field" (*Zveno—polya khozyain*).¹³ In the years of the grains blackout less was heard of this organizational form, leaving the impression that party viewpoints again had the upper hand. Now it appears that one who worked for this organizational change in the direction of more decentralized decision making was—General Secretary Mikhail Gorbachev.¹⁴ To make the new trend less objectionable, emphasis is now not so much on the *zveno*, but rather on localized decision making at the level of brigades or other subunits of a farm or firm—the experiment extends far beyond agriculture. For brigades and links (where such are in place), contracts are made for production and costs—the collective contract.¹⁵ For each such contract there is a cost-and-returns estimate (*khozraschet*).

Much of the current policy debate about agriculture centers around this decentralized concept and how it may fit into the socialist framework of Soviet agriculture. One authoritative article makes apparent reference to previous debates by declaring that any brigade member who shows initiative and dedicated work is the master of the land—and the country (*Deystvitelno khozyain zemli. A znachit i strany*).¹⁶ The same article goes on to expand on how to coordinate such individual contributions into the joint socialist effort. Other recent articles show how such contract brigades and links now embrace a considerable part of Soviet agriculture.¹⁷ This might be how Gorbachev's recent initiatives continue what he and others started years earlier.¹⁸

The intentions may be ambivalent, and here lies the problem of their final consequence. Reading a journal such as *Selskaya zhizn* (an organ of the Communist party's Central Committee), one gains the

impression that individual enterprise is laudable, but only if the benefits accrue to the community.

An example of discrepancy between announced intentions and actual results was cited recently in the case of the kolkhoz market. This is a decentralized element in the marketing system affording villages some economic incentives. The 1990 food plan intended these markets to take on an increasing role. However, from 1981 to 1985, the growth of such markets was nearly negligible.¹⁹

ENDS AND MEANS UNDER SOCIALISM

The initiatives toward functional decentralization appear sound enough, and if they are followed through vigorously, the result may very well be larger crop production, as well as higher factor productivities. But the initiatives are not altogether new, and their history is part of the permanent dilemma of the Soviet economy. This dilemma lies in the contradiction between productive efficiency and political efficiency. The former thrives on functional decentralization and individual reward, which are the essence of private enterprise.

The problem of productive efficiency has proved a deep-seated difficulty for the Soviet regime. It has gradually come to light that there is no general consensus on the central objective of the socialist economy. A large research effort appears to have ended in rather dismal intellectual disarray.²⁰

A contradiction between objectives was reflected by Gorbachev not long ago during a visit to France. He gave tribute to the advanced technology in French factories but declared that he placed higher priority on the continued employment of all workers. This comes close to the classical Luddite statement (early 1800's in England) that called for preventing the use of the new textile machines because they took away the livelihood of craftsmen working with manual tools.

In the Soviet Union, the concern about employment extends to employing a special class of workers, those of the party apparatus. Their resolve to keep a strong decision-making force in their own hands comes through very clearly in the Soviet periodical press. In the present phase of Soviet economic development, the party forces face stronger features of reality than they have had to cope with in a long time. Will Gorbachev's drive toward efficiency within the socialist framework be successful, or will that framework, supported by inertia, once again prevail against productive efficiency, as it has done so many times in the past? The outcome is not to be predicted; only time will tell. ■

THE CHERNOBYL DISASTER

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created under Nikolai Lukonin, formerly director of the Ignalina RBMK 1500 nuclear plant in Lithuania.

¹³*Sel'skaya zhizn'*, February 4, 1982, p. 1.

¹⁴V.P. Gagnon, Jr., "Gorbachev and the Collective Contract," *Soviet Studies*, vol. 39, no. 1 (January, 1987), pp. 1-23.

¹⁵A. Marushkin, "Kollektivnyy podryad - vo vse zven'ya sel'skokhozyaystvennogo proizvodstva," *Ekonomika sel'skogo khozyaystva*, no. 1 (January, 1986), pp. 40-48.

¹⁶E. Ligachev, "Chelovecheskiy faktor, khovraschet i perestroika v agro-promyshlennom komplekse," *Kommunist*, no. 4 (March, 1987), pp. 28-42, the quote from p. 34. The author is a party secretary and a Politburo member.

¹⁷V. Nikonov, "Polnee zadeystvovat' potentsial agro-promyshlennogo kompleksa," *Kommunist*, no. 5 (March, 1987), pp. 15-29.

¹⁸Gertrude E. Schroeder, "Gorbachev: 'Radically' Implementing Brezhnev's Reforms," *Soviet Economy*, vol. 2, no. 4 (October/December, 1986), pp. 289-301.

¹⁹D. Korovyakovskiy, "Kolkhoznyy rynek i snabzhenie naseleniya prodovol' stviem," *Voprosy ekonomiki*, September, 1986, pp. 80-89.

²⁰Pekka Sutela, *Socialism, Planning and Optimality: A Study in Soviet Economic Thought* (Helsinki: The Finnish Society of Sciences and Letters, 1984).

The ministry has evidently taken over some of the functions administered hitherto by the State Safety Committee and the Ministry of Power and Electrification.

ECONOMIC CONSEQUENCES

The economic consequences of the accident were mitigated at first by using power from thermal and hydroelectric stations, which worked through the normal summer maintenance periods. The fact that the disaster occurred in the late spring, when electricity consumption was at its lowest, also reduced the impact. Moreover, Chernobyl No. 4 unit was exporting electricity to Hungary. The Soviet Union was more directly affected by the temporary closure of units No. 1 and No. 2.

By the late fall, however, the impact of Chernobyl had risen considerably. To implement technical modifications, Soviet RBMK's, which produced about 55 percent of nuclear-generated electricity in the country, had been shut down over the summer. There were also delays in bringing onstream new capacities scheduled for the summer of 1986 at the Zaporozhye, Rovno, Kalinin and Khmelnitsky nuclear plants.

With the onset of a very early and harsh winter in the Soviet Union, during which the first snowfall in Moscow occurred on September 27, 1986, a crisis situation emerged. Industrial workers in heavy electricity consumption industries, like machine-building and ferrous metallurgy, were obliged to work at nonpeak periods during the evenings and at weekends; neon lights were turned off; and tight restrictions were placed on domestic electricity usage. Ironically, partial relief was provided when the No. 1 unit at Chernobyl was restarted and reattached to the grid system in early October, 1986.

Of the new nuclear reactors, those at Zaporozhye, Rovno and Kalinin came onstream in December, 1986. Thus the delay in completion was relatively short. Even the Khmelnitsky No. 1 unit, which has been under construction since 1978, was declared to be imminent in May, 1987.¹¹ However, delays in building nuclear plants at Zarnowiec (Poland) and Cernavoda (Romania), and problems at the Hungarian Paks stations may mean that the most damaging impact of Chernobyl is to East European countries that import Soviet electricity. The Hungarian Premier spoke of a "crisis situation" late in 1986 and maintained that other countries had tapped into Hungary's supply from the East European grid.

Soviet scientists like Valeri Legasov have made it plain that they see no alternative to nuclear power

expansion in the European part of the U.S.S.R. Plainly, however, future expansion is to be based primarily on water-pressurized (VVER 1000) reactors. Future plans for RBMK units other than those already in advanced stages of construction have been abandoned in light of the inherent weaknesses in the reactor's design.

After the accident, many Western scientists predicted that a virtual dead zone would develop in the northern Ukraine. It was argued that the loss of the Chernobyl region, as an insignificant marshland area, would have little impact on Soviet agriculture. As for the victims, a new Center of Radiology, under the auspices of the Academy of Medical Sciences of the U.S.S.R., was opened in Kiev in October, 1986. Its main purpose is to monitor the more than 100,000 persons subjected to high levels of radiation.¹²

In a documentary, several films and a play about Chernobyl, Soviet leaders displayed a self-critical attitude that suggested some rethinking of their building and operation of nuclear power plants. Generally, those Western scientists who visited the station in 1987 praised the Soviet recovery from the major disaster.

Some fundamental questions remain to be answered. First, the Soviet authorities seem to be of two minds concerning the future of the region. In March, two articles in the Ukrainian newspaper *Robitnycha hazeta* focused on the city of Prip'yat, the former city for plant operatives and the special zone. One of the articles noted that the head of the government commission investigating the accident, Boris Shcherbina (who has taken over for the second time), had stated that the city had been successfully cleansed of radioactive particles.

The account revealed that a new sports center is under construction in Prip'yat for plant operatives. The writer, an army major, was taken on a tour of a hothouse, in which fruits are being cultivated hydroponically. Against all odds, the article emphasized, Prip'yat "is coming back to life."¹³

In a March 17 article, N.P. Arkhipov of the State Committee for the Utilization of Atomic Energy referred to the precautions being taken for growing crops in the "first season." Asked when this first season would be, he replied that

The level of radioactivity and the tendency for its reduction allow the start of agricultural work as soon as this spring in at least half the villages of the 30-kilometer zone.

Fourteen Ukrainian villages were being made ready to accommodate evacuees in the summer of 1987 following the repopulation of 12 Belorussian villages earlier in January, 1987.

By June, 1987, however, the prognoses about the future of the region were much more sober. In late April, 1987, plans to complete the fifth and sixth Chernobyl units were shelved. Twenty-seven villages were declared unfit for habitation for years to come.

¹¹*Radyanska Ukraina*, May 17, 1987.

¹²*Trud*, September 11, 1986. More recent information about the new center was provided in *Vistiz Ukrainy*, no. 18 (May, 1987), p. 3.

¹³*Robitnycha hazeta*, March 22, 1987.

While the city of Chernobyl has been used to accommodate shift workers, the military and visitors to the zone, its original inhabitants have not returned. In an interview on Radio Kiev in early May, 1987, Ivan Plyushch, the chairman of the Kiev Oblast government, stated that the level of radiation around Chernobyl was below the limit required for the return of people to their homes, but that authorization would be given only in the summer and fall, "when specialists are totally convinced" of the safety of the pertinent villages.

As for Pripyat, the optimism expressed in the Soviet press in the spring of 1987 appears to have dissipated. In an interview, Evgeni Ignatenko, the general director of the Kombinat production association (which has been formed for clean-up work in the 30-kilometer zone), was asked whether the question of residence in Chernobyl and Pripyat "had been dropped for the time being." He pointed out that parts of Pripyat had been cleansed, but that the surrounding area was still contaminated. Moreover, he made it plain that future residents would be only those in charge of clean-up work who wished to use Pripyat as a temporary base. In brief, then, Pripyat will remain a ghost city, a permanent reminder of the uncontrolled atom.

The prevalence of the cesium element has rendered the zone a highly dangerous area. Fir trees in the region, for example, which shed their leaves only every four years, still contain radioactive particles. Falling pine needles are contaminating ground vegetation in forests. Cesium is also lodged in sediment in lakes in the area, and is particularly difficult to remove. The sarcophagus over the No. 4 unit is essentially an untried engineering experiment. Soviet scientists have stressed that it may not prove to be a viable long-term solution.

Because the zone was thought to be unfit for safe habitation, the new city of Slavutych is being built for plant workers, 28 miles by rail to the east on the border between Kiev and Cernigov oblasts. The city will be occupied later in 1987, and its projected size is 20,000 residents. About 6,500 builders have been housed in the shift settlement of Zelenyl Mys, but accommodation there is said to be unsatisfactory.¹⁴

Since the concrete sarcophagus has been built over and around the No. 4 unit, Soviet leaders have stressed that all leaks of radiation have stopped. Over the summer of 1986, some technical adjustments were made to all the Soviet RBMK reactors, but the rapidity with which the No. 1 and No. 2 Chernobyl units came back onstream (by November, 1986) prevented the implementation of all the improvements felt to be necessary for safe operation. This became evident after the visit of representatives of the United States Nuclear Regulatory Commission (NRC) in March, 1987.

¹⁴See, for example, *Pravda Ukrainy*, January 1, 1987. On Zelenyl Mys, see *Pravda*, July 23, 1986.

¹⁵*Pravda Ukrainy*, May 14, 1987.

Thus, Harold R. Denton, the director of the Office of Nuclear Reactor Regulation at the NRC, noted that a new minimum norm of 70-80 control rods in the reactor at all times had been established, but that none of the rapid-acting control rods (which might have prevented a Chernobyl-type accident) had been installed. By the summer of 1987, the latter had evidently been installed, but the reduction of the insertion (scram) time from 20 to 12 seconds would still be insufficient were the Chernobyl accident conditions to be repeated.¹⁵

Access to safety features is now restricted, but still subject to human fallibility in that the plant director is now in possession of the lockup key. Soviet doubt about the capability of their plant directors is evident from the fact that Chernobyl has had three directors in less than a year. Finally, according to Denton, only a few of the higher enriched uranium fuel assemblies necessary to reduce the positive void coefficient have been added to the No. 1 and No. 2 units. The enrichment of uranium in the RBMK has been raised over the years from 1.8 to 2.4 percent and above.

In addition, Chernobyl does not seem to have changed the pattern of building nuclear plants. After the accident, Boris Oleinik, speaking at the Ukrainian Writers' Congress in Kiev, asked why the authorities had not taken steps to review construction procedures after widespread criticism of the Chernobyl plant in the Ukrainian press. Such criticism has continued since the accident, most notably in the case of the building of two nuclear plants in the Ukrainian S.S.R. at Khmel'nitsky and in the Crimea, and must be considered inevitable in view of the continual reduction of timetables for building nuclear stations in the Soviet Union.

Finally, the international inspections of Soviet facilities may be of limited duration. As Boris Semenov of the IAEA noted, in the final analysis, Soviet leaders will decide what constitutes a safe reactor in their industry. The IAEA, which was first invited to inspect a Soviet nuclear plant (Novovoronezh) only in February, 1985 (the inspection took place in August, 1985), has gained some prestige from Chernobyl, but is hardly a powerful all-encompassing body. In the United States and Canada, the view of many nuclear experts is that IAEA inspections are basically unnecessary.

The Soviet Union can be expected to refer to Chernobyl as simply an isolated accident in a history that includes Windscale (United Kingdom) and Three Mile Island (United States), and many other alleged Western accidents. Evidence suggests, however, that the disaster was a direct consequence of the Soviet attitude toward nuclear power and the subordination of safety needs to economic demands. A sign that this attitude may not have changed is the restarting of the station before all the required improvements to the reactor have been made. ■

MILITARY POWER

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of commander of the western TVD probably reflects his defeat in a debate over the distribution of available resources. Yet the generals fully understand that the long-term strength of their military machine depends on Gorbachev's restructuring of the Soviet industrial system and the acquisition of levels of technology equivalent to the best in the West.²⁴

In sum, then, the reality of Soviet military power matches neither the "unprecedented" military machine depicted by the United States Defense Department, nor the rather bumbling and archaic organization of rustic peasants sometimes implicit in other descriptions. A late nineteenth century system adapted to the modern age, it retains many of the institutional strengths and weaknesses of its origins. At present, its development is slowed by serious demographic, economic and technological constraints. Nonetheless, its existing potential is impressive and is more than enough to defend the Soviet Homeland, preserve the Soviet position in East Europe, seek limited expansion along the Soviet periphery and, in general, sustain the Soviet Union as a superpower. But whatever the success of Gorbachev's program of economic renewal and the levels of future military spending, there is little likelihood that the Soviet Union can create a military machine capable of a successful drive for European hegemony, much less for world domination. ■

²⁴See "The Soviet Economy Under a New Leader," *op. cit.*, pp. 27-30, and James T. Westwood, "The USSR's 12th Five-Year Plan and Its Zero-Growth Defense Budget," *SAFRA* 11 (1986-1987) (forthcoming, 1987).

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criticism of the military had increased.²² There were many issues. Some were intramilitary issues like the style of military leadership and treatment of recruits by officers. Others were party-military issues; for example, the efficiency with which the military uses its economic resources and, probably, the size and nature of the defense budget.

Gorbachev had moved slowly, and had made few changes in the military leadership, although the failure to promote former Defense Minister Sergei Sokolov to full membership on the Politburo could hardly have been missed as a snub to military interests, especially when his predecessor, Marshal Dmitri Ustinov,

²²The tone of Defense Minister S. L. Sokolov's Army-Navy Day article on February 23 suggested that he sensed a need to respond to the January plenum. *Pravda*, February 23, 1987, p. 2. He also was reported to have participated in a meeting of party officials in the Defense Ministry in mid-March that was critical of the military for lagging in "restructuring." See *Krasnaya zvezda*, March 18, 1987, p. 2.

had been a full member and when both the other major bureaucracies dealing with national security affairs—the KGB and the Foreign Ministry—were represented by full Politburo members (Foreign Minister Eduard Shevardnadze and KGB Chairman Victor Chebrikov). Thus, evidence that not all was well between the party and the military clearly existed before the Rust affair, but Gorbachev seized on the penetration of Soviet air defenses by a 19-year-old West German flying a small pleasure aircraft and his successful landing in Red Square to order heads to roll in the military. He removed the commander in chief of the Air Defense Forces, Marshal Alexander Koldunov, and replaced Sokolov by jumping a 64-year-old, Dmitri Yazov, who had only been brought to Moscow a few months earlier from the Far East, over numerous senior officers. Gorbachev sent a message to his military and repeated the pattern he had used in political appointments by promoting a relatively young officer. In case anyone missed the point, the CPSU sent Boris Yeltsin, a candidate member of the Politburo and head of the Moscow party apparatus, to upbraid the Moscow Air Defense District, a meeting that was publi-

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THE SOVIET ECONOMY

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ive problems by raising plan targets for a few consumer goods and services, including housing construction, and by stepping up the pressure on all business firms to produce more consumer goods and to provide some kinds of consumer services.

Rather, it seems that the objective of squeezing out more for consumers is to be accomplished by political pressure to implement a "do it yourself" strategy imposed on firms and local authorities everywhere. In this way, the government is trying to enforce earlier decrees that required all industrial enterprises to produce a quota of consumer goods of some kind and all firms everywhere to provide personal or repair services for their workers and the general public. Such an approach seems ill-suited to modernization of production facilities in the backward consumer sector.

Presumably, the fast-paced modernization of the industrial capital stock that Gorbachev craves would be considerably facilitated by substantial purchases of state-of-the-art technology from the West. Although Gorbachev has been ambivalent on how much he wants to use that option, the Soviet ability to do so easily has been seriously curtailed during the past two years. During 1985-1986, Soviet exports to the West dropped by nearly one-fourth, the combined result of decreased sales of oil and weapons in 1985 and the sharp fall in the price of oil and a depreciation of the dollar in 1986. The government coped with these adversities by selling more gold, borrowing heavily and reducing imports, especially agricultural products. Another

consequence of the hard currency problem was a rise in the share of Soviet trade that is conducted with other Communist countries to nearly two-thirds—the highest in more than 15 years. Even so, those countries were unable to make up for the lost trade with the developed West, and total trade in real terms rose by a mere 1.4 percent over the two-year period.

To continue the momentum developed in 1986, the plans for 1987 call for a growth of national income and industrial production of better than four percent. The growth of machinery output is scheduled to rise sharply to a level not seen since the early 1970's. The grain crop is supposed to reach 232 million metric tons, a near record. Judging from the results thus far, however, the outlook for the economy in 1987 is not particularly bright. As noted, the industrial sector has gotten off to a poor start, and problems continue in the construction sector. Unfavorable weather conditions during the winter and spring point to a much poorer agricultural performance than in 1986. Also, the problems in foreign trade show little prospect of being alleviated. Unless a sharp turnaround occurs in the last half of the year, the ambitious plan targets will be missed by sizable margins.

For this five year plan, especially in 1986–1987, Gorbachev has opted not only to speed up the growth of investment, but also to reorder its allocation in favor of energy sectors and crash programs to provide modern capacities in the machinery and chemicals industries—often labeled the “progressive” sectors. In opting for such a lopsided allocation, Gorbachev runs a major risk of recreating imbalances and bottlenecks similar to those that were the consequence of misguided investment allocations and crash programs in the recent past. Moreover, crash programs are likely to generate waste and investment indigestion, as they did in Khrushchev's massive “chemicalization” drive in the early 1960's and in the drive for west Siberian energy development in the late 1970's.

Another “campaign” aspect of Gorbachev's investment policy is to concentrate funds on the renovation of existing plants, a recipe that has not worked well in the past, disrupts current production, and may be uneconomical in many cases, where it might be cheaper to build a new plant rather than to modernize the old one.¹⁵ In the machinery industries—perceived by Gorbachev to be the key to his modernization drive—large increments to investment funds probably cannot be absorbed efficiently in a short period. The more advanced technologies and tooling needed will not be on hand yet, so that the new capital stock generated by the burst of funds hardly will be more modern than before.

While having to absorb a surge of investment,

¹⁵See Boris Rumer, “Soviet Investment Policy: Unresolved Problems,” *Problems of Communism*, September–October, 1982, pp. 53–68.

machinery producers also are being pressured to speed up the retirement of old assets, intensify their use of existing capacities by introducing second and third shifts (unpopular with workers), more than double the growth of output, and radically upgrade its quality. All this, along with the need to cope with new “reformed” working arrangements, would seem to amount to overkill. It is no wonder that malaise has shown up in the machinery industries in 1987.

Gorbachev's stance toward workers and consumers—also risky—is to demand hard work and creativity in return for pledges of future substantial material rewards. Even the relatively small gains scheduled for the current five year plan are threatened by the short shrift being accorded to investment in the consumer sectors and social infrastructure. Measures to force managers to direct wage increases to the skilled and most productive workers run afoul of a deep-seated popular predilection for egalitarianism instilled over 70 years of Soviet socialism. Similarly, the drive to force managers to shed workers produces job insecurity, which is also unlikely to set well with the populace. Unremitting pressure and exhortation may soon lose their effectiveness as motivational forces and, consequently, their positive impact on economic performance. Whether Soviet workers will see virtue in being allowed to choose their senior managers remains to be seen.

Although Gorbachev has accomplished a great deal in his first 28 months of tenure, his actions do not add up to a well-formulated, consistent program of genuine economic reform. Rather, they are a grab bag of measures that continue the pattern of the past 20 years. Although new laws encourage cooperative and private economic activities, they do not go very far even on paper, and their effect will depend on the political climate in which they operate; i.e., on whether the small enterprises can obtain needed materials and whether restrictions are put on prices and incomes. The vast bulk of economic activity remains under state ownership and subject to state direction through compulsory plan targets. All important producer goods continue to be rationed, and the “greater flexibility of prices” called for by Gorbachev has been applied only on the fringes.

At the moment, the centerpiece of Gorbachev's reform program is the rapid implementation of the old idea of requiring firms to finance all their current and capital expenditures from their own revenues, now including wage increases resulting from a mandated overhaul of wages and work norms. If a firm cannot cope, it may be declared bankrupt and liquidated. While being required to conduct their affairs in this more demanding accounting environment, firms have been accorded wider latitude in making a variety of decisions, especially with regard to labor, wages and some investment. Already introduced in a sizable

number of firms, these arrangements are creating a host of problems and few benefits.

Although the idea of autonomous, self-financing socialist business firms threatened with bankruptcy for failure carries an aura of markets and competition, it is, in fact, an artificial accounting construct under present Soviet conditions, and the belief that large gains in efficiency will accrue from enforcing it is a grand illusion. Because prices of products and material inputs do not reflect the economic tradeoffs (scarcities), the derivative accounting categories of sales, costs, profits and returns on capital can be misleading. Managerial decisions based on such accounting do not result in the best mixes of inputs and outputs; profits do not indicate the relative efficiency of firms; and the failure to earn profits and therefore go bankrupt does not necessarily mean that the firm was inefficient.

Even worse, under the rules set for self-financing at present, the firm's freedom to maneuver is severely restricted by a host of centrally set parameters that determine the goods to be produced, limit the physical consumption of raw materials and energy, regulate the size and growth of wage and incentive funds, and allocate profits to specified uses. Indeed, these regulators, termed "economic normatives," are a vaunted part of the reform package. But firms cannot change the output mix at will, because of the diktat of the plan, even when couched in terms of contracts. They cannot readily alter the inputs of energy and raw materials, because they cannot find alternative supplies and suppliers. And rewards still depend on meeting plans for one indicator or another.

In late June, 1987, a special party plenum approved a new major reform document entitled "Main Guidelines for Fundamentally Reorganizing Economic Management."¹⁶ This lengthy document, in effect, endorses the measures and approaches to reform already in place and described above. Couched in fairly broad language, it lays out a timetable for putting into place a "new economic mechanism" as of 1991, the start of the thirteenth five year plan. Specifically, the system of self-finance for firms is to become universal; the central planning and administrative bureaucracies are to be thoroughly reorganized and reduced in size; and the forms of central planning are to be modified to accommodate greater autonomy.

Further development of wholesale trade in materials and capital goods is to occur, with only "particularly scarce" goods to be centrally allocated; prices are to be revised to bring them into line with costs, with the share of centrally fixed prices to be "sharply cut"; and greater authority is to be given to republic and local government bodies. The details are supposed to be spelled out in 11 government decrees

scheduled for adoption by the end of 1987.

What Gorbachev has wrought thus far is neither "radical" nor even a real reform of the economic system. Except for the go-ahead for cooperative and private activity and a push for industrial democracy, his measures seem to amount to yet another—and potentially much more disruptive—round of modifying the existing system without scrapping any of its essential features. If the past is any guide, this round, like its predecessors, will be largely ineffective. Will the Politburo then have the courage to sanction the really radical proposals being made by some Soviet economists, like the total abolition of directive planning and rationing and the freeing of prices to reflect supply and demand, thus creating a true "socialist market"? ■

UNITED STATES-SOVIET RELATIONS

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cized by an article in the Army newspaper, *Krasnaya zvezda* (Red Star).²³

This evidence of strain in party-military relations has not been directly linked to Gorbachev's arms control initiatives. But it has been explicitly linked to military foot-dragging in support of Gorbachev's policies generally and the resistance to "new thinking" in particular. Indeed, the very care taken by Chief of Staff Sergei Akhromeyev to craft his own public statements in a manner that reflects the General Secretary's policies probably constitutes evidence that he sensed party irritation over the failure of other military leaders to do the same and may explain his own political survival. During his visit to Czechoslovakia in April, Gorbachev himself implicitly admitted that the Soviet military buildup had created areas in which Soviet forces were "superior" and argued explicitly for eliminating these asymmetries by reducing Soviet forces rather than permitting an American and NATO buildup.²⁴

It is important not to misunderstand Gorbachev's policy. He has continued to indicate his support for powerful military forces and to blame the United States for the arms race. But Gorbachev has also indicated a willingness to take initiatives in an effort to reverse the Soviet-American military competition and has countered military foot-dragging on his policies with vigorous assertion of CPSU control.

The new General Secretary indicated his eagerness to meet with President Reagan and "to end the ice age" in Soviet-American relations almost as soon as he came to power. But relations remained very chilly during his first months in power. The root issues were the Soviet Union's effort to make progress on arms control, by which it meant restrictions on SDI (a precondition of a summit) and President Reagan's

¹⁶ *Pravda*, June 27, 1987.

²³ *Krasnaya zvezda*, June 17, 1987, p. 2.

²⁴ *Pravda*, April 11, 1987, pp. 1, 2.

insistence that his SDI program go forward unconstrained.²⁵

The summit itself had many moments of media success—including famous television footage of the two leaders sitting before a roaring fireplace, but little substance and no progress on the most important arms control issues. There were agreements on cultural exchanges, on creating two new consulates and on air safety in the northern Pacific. The two leaders agreed to continue their dialogue, and Gorbachev, on his return to Moscow, indicated his preference for beginning immediate preparations for the next summit round.²⁶

This was the context for Gorbachev's dramatic statement on arms control on January 16, 1986. He proposed a 6,000-warhead limit in each country's strategic arsenals and a ban on SDI testing for a first stage lasting five to eight years. In that stage, all Soviet and American INF would be eliminated from Europe. A second stage would begin no later than 1990. In it, the 50 percent reduction would be completed, and the superpowers would continue to reduce the number of intermediate-range weapons and eliminate tactical nuclear weapons. A third stage would begin no later than 1995, and would complete the elimination of all nuclear weapons.

Once again, tangential issues intruded. The United States Federal Bureau of Investigation arrested a Soviet United Nations employee, Gennadi Zakharov, on August 23 for espionage. The Soviet Union retaliated by arresting Nicholas Daniloff, a reporter for *US News and World Report*. These events steadily deepened into a crisis during the first weeks of September. Meetings between Secretary of State Shultz and Foreign Minister Shevardnadze in New York finally resolved the crisis, and a presidential news conference on September 30 announced both the resolution of the Daniloff crisis and the fact that a summit had been set for October 11-12 in Iceland. The summit itself, therefore, was hastily prepared, and nearly ended in disaster. Reagan was reported to have ended his final meeting by collecting his papers and accusing Gorbachev of not wanting an agreement. What the Soviets wanted most, constraints on SDI, President Reagan

was unwilling to give. Gorbachev took the highly unusual step of addressing the Soviet people twice within nine days on his return to Moscow—October 14 and 22.²⁷

The attempt to negotiate a comprehensive arms control agreement broke up on the shoals of SDI. The fundamental interests of the two sides, as interpreted by the incumbent leaderships, were simply too far apart. And it was not at all clear in the months following Reykjavik whether these differences could be narrowed sufficiently to provide material for a follow-on summit in 1987 or early 1988. The Soviet leadership had to make a fundamental decision—would it strike a deal with President Reagan on part of a comprehensive arms control package and accept an agreement that did not include constraints on SDI? Gorbachev apparently calculated that some agreement was better than none, or at least that keeping a reduced arms control package on the agenda and in the international media was in Soviet interests.

This was the meaning of Gorbachev's announcement on March 1, 1987, that the Soviet Union was willing to "single out" INF and that a "separate agreement on it [could] be concluded without delay."²⁸ The accord would eliminate all American and Soviet medium-range missiles in Europe within five years, and reduce to 100 these Soviet missiles in Asia. The United States would deploy a similar number in the United States. These were explicitly considered to be additional Soviet concessions. Two problems developed. Some officials in NATO expressed reservations about the elimination of INF from Europe, arguing that deterrence and NATO strategy required a full range of escalation options.²⁹ Gorbachev worked on that problem by obtaining the support of Britain's Prime Minister Margaret Thatcher and, eventually, the ruling coalition in Germany. The second problem had its constituency in NATO, as well as in Washington. This was the issue of short-range Soviet missiles, for which there was no United States counterpart. On July 22, Gorbachev agreed to global double zero, meaning that these short-range systems would also be eliminated.

A pattern of Soviet initiatives in arms control continues: Whether a summit will, in fact, take place is unclear. But Gorbachev's desire to reach an agreement is clear. Not all analysts are yet convinced that this is any more than clever public relations, but in degree and in kind Soviet arms control initiatives and Soviet efforts to cooperate with the United States suggest a change in Soviet thinking, what the Soviet leadership is now calling the "new thinking." There has not yet been an agreement, but the future agenda is becoming clearer. After INF, the more difficult problems of conventional arms reductions and the old difficulty of strategic offensive and defensive forces remain. No doubt these await a new American leadership. ■

²⁵For his statements at a dinner for visiting Italian Prime Minister Bettino Craxi, see Moscow Domestic Service, FBIS, May 30, 1985, pp. G4-G7, and a very harsh speech at Dnepropetrovsk the next month. See also *Pravda*, June 27, 1985, pp. 1, 2. The Moscow Television version was even harsher. See FBIS, June 27, 1985, pp. R1-R14.

²⁶*Pravda*, October 4, 1985, p. 1.

²⁷*Pravda*, October 14, 1986, pp. 1-2. See the transcript of his address on the "Vremya" television program, in FBIS, October 15, 1986, pp. DD1-DD11, and October 23, 1986, pp. AA1-AA10.

²⁸*Pravda*, March 1, 1987.

²⁹"NATO Commander Voices Fears on INF Removal," *Izvestia*, October 22, 1986, p. 5; "NATO Chief Seeks to Have Missiles," *NYT*, April 21, 1987, p. 6; "General Sees Missile Plans as a Mistake," *NYT*, June 24, 1987, p. 3.

THE MONTH IN REVIEW

A Current History chronology covering the most important events of August, 1987, to provide a day-by-day summary of world affairs.

INTERNATIONAL

Arms Control

Aug. 6—In a speech to the UN Disarmament Conference, Soviet Foreign Minister Eduard Shevardnadze says that the main obstacle preventing a U.S.-Soviet agreement on short and medium-range missiles is West Germany's insistence on keeping its Pershing missile warheads.

Aug. 25—In Geneva, the U.S. negotiators present a plan that modifies a previous U.S. insistence on intrusive on-site inspection of nuclear sites; it is believed that this may prove more acceptable to the Soviet Union.

Aug. 26—West German Chancellor Helmut Kohl announces that West Germany will dismantle its 72 Pershing missiles, provided the U.S. and the Soviet Union reach agreement to scrap all their short and medium-range nuclear missiles. U.S. President Ronald Reagan says that "we can wrap up an agreement on intermediate-range nuclear missiles..." with the Soviet Union quickly. He also challenges the Soviets to make public facts about their military budget and the size of their military establishment.

Central American Peace Plan

(See also *Cuba; Nicaragua; U.S., Foreign Policy*)

Aug. 7—After 4 months of negotiations, the Presidents of Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica sign a tentative peace plan designed to resolve the regional conflicts in the area. The leaders agree on a timetable for a cease-fire on guerrilla wars and the establishment of an international commission for verification purposes; the plan also provides for negotiations with unarmed guerrilla groups, but leaves the size and weaponry of each country's armies and the number of foreign advisers to further negotiation; it also calls for press freedom, free elections and the lifting of state-of-emergency regulations.

Aug. 19—Central American foreign ministers begin 2 days of meetings in San Salvador to discuss carrying out the proposed peace plan.

Aug. 20—The ministers adjourn and decide to meet again in 30 days.

Aug. 22—The 5 signers of the peace plan invite 8 other Latin American nations to join a commission that will verify the carrying out of the provisions of the peace plan.

Aug. 23—In Caracas, 13 Latin American nations end a meeting after establishing a commission to verify the results of the peace plan.

Aug. 27—Meeting with President Reagan in Los Angeles, contra leaders ask President Reagan to seek congressional approval for new military and nonmilitary aid for the contras, and to keep the military aid in escrow; if the Sandinista government of Nicaragua fails to comply with the terms of the Central American peace plan, the military aid would be supplied after the September 30 deadline ending authorized aid.

International Terrorism

Aug. 17—It is reported that American journalist Charles Glass, kidnapped in Beirut on June 17, has escaped from his captors and is in Syrian hands.

Aug. 19—Glass rejoins his family in London.

Iran-Iraq War

(See also *Iran; Iraq; U.S., Foreign Policy*)

Aug. 10—A Panamanian-registered supertanker, carrying Iranian oil, strikes a mine in the Strait of Hormuz.

U.S. officials say that a U.S. Navy fighter fired 2 missiles at an Iranian fighter on August 8; the Iranian plane, which was not hit, had approached a pair of U.S. fighters dispatched from an aircraft carrier in the Gulf of Oman.

Aug. 11—Great Britain announces it will send 4 minesweepers to the Gulf of Oman to protect British shipping; in a similar statement, France says it will send 2 minesweepers to the Gulf of Aden to protect French-registered tankers.

Aug. 12—The United Arab Emirates closes and then reopens a portion of its staging area outside the port of Fujaira on the Gulf of Oman; the staging area was temporarily closed to allow mines to be swept from the area.

Aug. 15—A mine destroys a small supply boat in the area off the port of Fujaira; the area had been declared safe by the United Arab Emirates on August 12.

Aug. 16—The U.S. carrier *Guadalcanal*, carrying 8 mine-sweeping helicopters, arrives in the Persian Gulf and is expected to assist in the American effort to protect Kuwaiti tanker convoys.

Aug. 20—Iran denies that it has been planting mines in international waters.

Aug. 24—In the Persian Gulf, the destroyer U.S.S. *Kidd* fires warning shots across the bows of 2 small sailing ships; the ships failed to heed warnings to remove themselves from the vicinity of a convoy of 4 Kuwaiti tankers.

Aug. 29—Iraqi planes bomb Iranian off-shore oil installations and a supertanker, the first such actions since the July 20 UN Security Council resolution calling for a cease-fire in the war.

Aug. 30—Iraqi planes bomb Iranian oil installations for the 2d day in a row and report hitting 2 more "large naval targets."

Aug. 31—Iraq raids Iranian targets for the 3d straight day; the U.S. State Department protests the renewed activity to Iraq's ambassador to the U.S., Nizar Hamdoon.

Iran retaliates for the Iraqi attacks with speedboat attacks on a Kuwaiti freighter.

United Nations (UN)

(See also *Intl, Iran—Iraq War; U.S., Foreign Policy*)

Aug. 1—The UN Conference on Trade and Development (UNCTAD) remains deadlocked over ways to ease the debt loads of third world countries.

Aug. 2—UNCTAD ends its conference with a declaration of agreement to aid indebted third world countries to meet their obligations, to support the efforts of those countries to increase economic development through private enterprise and to help industrialized nations maintain their economic buoyancy.

AFGHANISTAN

Aug. 4—Western sources report that heavy fighting has broken out between the rebels and Afghan-Soviet forces in Kabul and Kandahar, the country's 2 largest cities.

AUSTRIA

(See *U.S., Foreign Policy*)

BANGLADESH

Aug. 4—Officials in Dacca say that the death toll in the last 2 weeks of severe flooding has risen to 238.

Aug. 10—In a major shakeup, President H.M. Ershad dismisses 9 ministers from his Cabinet.

CHAD

(See also *Libya*)

Aug. 9—In northern Chad, Chadian soldiers attack Libyan forces in the Aozou Strip, which Libya has held for the last 14 years.

Aug. 10—France notifies the government of Chad that French forces will not take part in the campaign to drive Libyan soldiers from the Aozou Strip.

Aug. 15—In an interview, President Hissène Habré claims that 15,000 Libyan troops are stationed on the Libya-Chad border and predicts a long war with Libya.

CHILE

Aug. 13—The Chilean government allows exiled novelist Ariel Dorfman to return to the country.

CHINA

(See *U.S., Foreign Policy*)

COSTA RICA

(See *Intl, Central American Peace Plan; Nicaragua*)

CUBA

(See also *Venezuela*)

Aug. 13—Cuban leader Fidel Castro endorses the peace plan signed in Guatemala August 7.

EL SALVADOR

(See *Intl, Central American Peace Plan*)

FRANCE

(See *Intl, Iran—Iraq War; Chad*)

GERMANY, EAST

(See *Germany, West*)

GERMANY, WEST

(See also *Intl, Arms Control*)

Aug. 12—West Germany exchanges 3 Soviet bloc spies, including convicted KGB agent Manfred Rotsch, for 2 West German prisoners in East German custody.

Aug. 17—Former Nazi leader Rudolph Hess dies in Spandau prison in West Berlin.

GUATEMALA

(See *Intl, Central American Peace Plan*)

HONDURAS

(See *Intl, Central American Peace Plan*)

INDIA

(See also *Sri Lanka*)

Aug. 7—In the Sikh holy city of Amritsar, a curfew is ordered after 2 days of violence in Punjab that resulted in the deaths of 25 Hindus.

IRAN

(See also *Intl, Iran—Iraq War; Iraq; Italy; Saudi Arabia; U.S.S.R.; U.S., Foreign Policy, Political Scandal*)

Aug. 1—In response to news about the violence involving Iranian pilgrims in Mecca, angry crowds storm the Saudi and Kuwaiti embassies in Teheran.

Aug. 2—Iran blames the U.S. for the riot in Mecca, calls for

the removal of the Saudi royal family and announces that naval exercises, code-named "martyrdom," will be held this week in the Persian Gulf.

Aug. 4—Iran starts its naval maneuvers in the Persian Gulf.

Aug. 5—Iran says that it has launched its first submarine as part of the "martyrdom" naval maneuvers.

Aug. 26—The government rejects yesterday's ultimatum by the Arab League demanding a compromise settlement of the Iran—Iraq War.

IRAQ

(See also *Intl, Iran—Iraq War*)

Aug. 10—Iraqi jets bomb Iranian oil installations for the first time since the UN peace resolution last month.

ISRAEL

Aug. 5—Israel lifts a blockade it imposed on the Gaza Strip August 2; the blockade was a response to the murder of a military police commander.

Aug. 16—The Cabinet postpones a decision to vote on continuing construction of the Lavi fighter-bomber; last week, the U.S. asked Israel to abandon the project, citing excessive costs in U.S. aid to Israel.

Aug. 30—The Cabinet votes 12 to 11 to stop production on the Lavi fighter.

ITALY

Aug. 16—The government says it is investigating allegations that an Italian company sold mines to Iran under government export licenses.

JAPAN

(See *U.S.S.R.*)

KOREA, NORTH

(See also *Korea, South*)

Aug. 6—North Korea accepts South Korea's August 3 proposal to open general negotiations, but demands that the U.S. participate in any discussion on troop reductions.

Aug. 22—North Korea defaults on a loan from a group of Western banks; this is the first loan default by any country since August, 1982.

KOREA, SOUTH

(See also *Korea, North*)

Aug. 3—The government proposes a meeting between its foreign minister and North Korea's, in order to discuss humanitarian, economic and political issues.

Aug. 13—Ruling party chairman Roh Tae Woo says that workers, who have engaged in a series of massive strikes this month, are justified in asking for higher wages and better working conditions.

Aug. 14—Defense Minister Chung Ho Yong says the military will support the next President, who is to be elected under the new constitution.

Aug. 18—A group of 40,000 workers call off a violent strike at the Hyundai facility in Ulsan after the government says it will intervene on behalf of the strikers.

Aug. 19—Under pressure from the government, Hyundai officials recognize an independent union formed by protesting Hyundai workers.

Aug. 22—On the southern island of Koje, a worker dies as a result of violence during a labor protest at the Daewoo shipyard.

Aug. 26—The strike against the Daewoo Shipbuilding and Heavy Machinery Company is settled.

Aug. 29—Police find the bodies of 32 people in the drop-ceiling of a factory in Yongin; the victims, believed to be

members of a religious cult, may have participated in a mass suicide pact.

Aug. 31—The 2 main political parties in South Korea reach an accord on differences about constitutional revision, including the length of the President's term and the scope of his powers; the compromise solution is seen as a major step toward direct elections.

KUWAIT

(See *Intl, Iran—Iraq War; Iran; U.S., Foreign Policy*)

LIBYA

(See also *Chad*)

Aug. 28—Libya claims that it has retaken the portion of the Aozou Strip that it lost to Chad earlier this month.

MOZAMBIQUE

Aug. 6—The government announces the reactivation of a nonaggression pact signed 3 years ago with South Africa.

NAMIBIA

Aug. 2—Over 3,100 mine workers, on strike for better working conditions against a copper-mining company, are dismissed.

NEW ZEALAND

Aug. 15—Prime Minister David Lange's Labor government wins a second 3-year term in Parliament.

NICARAGUA

(See also *Intl, Central American Peace Plan; U.S., Foreign Policy, Political Scandal*)

Aug. 5—President Daniel Ortega Saavedra says that the U.S. and Nicaragua should engage in direct talks of an "unconditional nature" regarding a potential Central American peace plan.

Aug. 12—The government withdraws its complaint in the World Court against Costa Rica; Nicaragua had accused Costa Rica of allowing anti-Sandinista rebel operations within Costa Rica's borders.

Aug. 21—Contra leaders agree to accept the proposed Central American peace plan, on the condition that they are allowed to negotiate directly with the Sandinista government and to keep their arms until a cease-fire.

PAKISTAN

Aug. 3—A demand from the U.S. that Pakistan's nuclear program be liable to international inspection is rejected by Pakistan.

PANAMA

(See also *Intl, Iran—Iraq War*)

Aug. 2—In a document released by his lawyer, Colonel Roberto Díaz Herrera retracts his charges of corruption and murder against the current military regime.

Aug. 5—The government orders the arrest of 5 prominent opposition leaders, charging them with sedition.

PHILIPPINES

Aug. 2—The secretary of local government, Jaime Ferrer, is assassinated by unknown gunmen in Manila; this is the first assassination involving the government of President Corazon Aquino since it took office in February, 1986.

Aug. 13—The government certifies the election of opposition leader and former Defense Minister Juan Enrile to the Senate.

Aug. 25—Although President Aquino agrees to the partial reversal of a proposed fuel price increase, labor union

leaders have called for a nationwide general strike tomorrow.

Aug. 26—Thousands of workers participate in the general strike to protest the policies of the Aquino government; more than 100 arrests are reported.

Aug. 27—Several hundred rebellious troops attack the presidential palace, several television stations, and 3 military bases in an attempted coup; it is believed that the troops are led by Colonel Gregorio Honasan, a former aide to Senator Juan Ponce Enrile.

Aug. 28—The coup attempt is successfully put down by government forces; at least 25 people, mostly civilians, were killed and 275 were injured in the fighting; among the wounded was President Aquino's son.

Aug. 29—President Aquino calls for the arrest of the leaders of this week's military revolt.

SAUDI ARABIA

(See also *Iran*)

Aug. 2—In a statement today, the Saudi government says that 402 people were killed and 649 people were injured during the riot outside the Grand Mosque in Mecca; included in the fatalities were 275 Iranians, 85 Saudis and 42 pilgrims of other citizenship.

Aug. 4—Saudi officials claim that the riot in Mecca was related to a plot by Iran to capture the Grand Mosque.

Aug. 25—At a news conference, government representatives accuse Iran of sending "criminal gangs" of revolutionary guards to Mecca, in order to harass pilgrims.

SOUTH AFRICA

(See also *Mozambique; U.S., Political Scandal*)

Aug. 9—The National Union of Mineworkers goes on strike, asking for more benefits and higher wages at coal and gold mines; as many as 300,000 workers are involved, making this the largest strike in South African history.

Aug. 12—Police arrest 78 mine union officials on charges of subversion and conspiracy to murder miners who would not join the strike.

Aug. 13—President P. W. Botha rules out an early end to the national state of emergency and accuses foreign diplomats of "undermining the state and promoting extra-parliamentary politics."

Aug. 22—In a clash with security officials at a gold mine near Johannesburg, 1 black mine worker is killed and 20 others are injured.

Aug. 27—In response to yesterday's rejection by mine workers of a proposed settlement of the gold and coal mining strike, 20,000 miners are dismissed from their jobs. This brings to 31,000 the total number of miners dismissed since the strike began.

Aug. 30—The National Union of Mineworkers settles its 3-week strike with gold and coal mine owners; the miners accept improvements in benefits, but fail to gain an increase in wages.

SRI LANKA

Aug. 4—The leader of the Liberation Tigers of Tamil Eelam, the most powerful of the Tamil separatist groups, formally orders his followers to surrender their arms to the Indian peacekeeping force.

Aug. 18—One legislator is killed and 14 others are wounded in a grenade attack in a parliamentary meeting room in Colombo.

SWITZERLAND

(See *U.S., Political Scandal*)

SYRIA

(See *Intl, International Terrorism*)

U.S.S.R.

(See also *Intl, Arms Control; Afghanistan; Germany, West; U.S., Military*)

- Aug. 3—The Communist party's Central Committee and the Council of Ministers approve a new law curtailing the role of central planners in the Soviet economy.
- Aug. 4—Tass reports that the Soviet Union has reached a general agreement with Iran to cooperate on the construction of large-scale railroad and pipeline projects.
- Aug. 20—The Soviet Union expels 2 Japanese businessmen, charging them with illegal espionage activities; later in the day, Japan orders a Soviet deputy trade representative to leave Japan.
- Aug. 23—In the Baltic states of Latvia, Lithuania and Estonia, the local governments allow open protests marking the 48th anniversary of the signing of the secret pact between Stalin and Hitler that ceded the Baltic states to the U.S.S.R.
- Aug. 24—The Soviet press blames Western radio stations for instigating yesterday's protests in the Baltic states.

UNITED ARAB EMIRATES

(See *Intl, Iran—Iraq War*)

UNITED KINGDOM

Great Britain

(See also *Intl, Iran—Iraq War*)

- Aug. 4—The government says that it will prosecute *The News on Sunday* for violating the press ban on publishing excerpts from the memoirs of former intelligence agent Peter Wright.
- Aug. 6—The Social Democratic party votes to merge with the Liberal party.

UNITED STATES

Administration

- Aug. 4—In a 4-0 decision, the Federal Communications Commission votes to abolish its 38-year-old fairness doctrine because it was harmful and stifled democratic debate; the doctrine had been developed to force radio and television stations to allow equal time to contrary points of view on important issues.
- Aug. 7—President Ronald Reagan tells the Senate Select Committee on Intelligence that, in the future, he will inform Congress and the National Security Council (NSC), in writing, about all covert operations and private individuals and foreign countries aiding such operations; he also agrees that all agencies involved, including the NSC, should obey these regulations and that the President should not sign any authorization documents retroactively.
- The Securities and Exchange Commission issues rules that define what it calls insider trading.
- Aug. 11—President Reagan selects C. William Verity Jr. as Secretary of Commerce, succeeding the late Malcolm Baldrige.
- Aug. 12—Addressing the nation, President Reagan says, "The buck does not stop with Admiral [John] Poindexter... it stops with me." He also says, "I had the right, the obligation, to make my own decision." Although President Reagan says that his policy "went astray," he does not add any new light on the events of the Iran-contra arms deal. He also says that he intends to be active in the rest of his term and that he will work to improve relations with Congress.
- Aug. 13—As the President's Marine helicopter prepares to land at his Santa Barbara ranch, it nearly collides with a small private plane.

Aug. 20—The Labor Department expands its "workers-right-to-know" regulations, which require employers to inform workers of potentially hazardous substances on the job.

Aug. 22—Transportation Secretary Elizabeth Dole adds 9 airports to the 23 airports already listed where tight restrictions exist on air traffic around the airports and small private plane traffic is carefully regulated.

The Education Department predicts that the total cost of education in the U.S. will be \$308 billion in 1987-1988.

Aug. 24—President Reagan names a 13-member panel to study "whether federal legislation is needed to ease the adoption process" and to determine "if any state or local actions could speed the process."

Aug. 26—U.S. attorney for the Eastern District of New York Andrew Maloney files a civil racketeering suit against the financial resources of the organized-crime Bonanno family to attempt to stop its operations.

Federal Aviation Administration director T. Allan McArtor calls a meeting of more than 200 airline pilots and tells them to renew their "vigilance in the cockpit" in the wake of recent incidents involving pilot error and the August 16 crash of a Northwest Airlines jetliner that killed 156 people just after takeoff at Detroit.

Aug. 28—Transportation Secretary Elizabeth Dole announces agreements with 6 major airlines to reduce travelers' delays at 4 additional large airports; the delays have been caused, in part, by scheduling problems.

Aug. 29—Secretary of Health and Human Services Otis Bowen issues new restrictions on abortions and abortion information by family planning clinics that receive federal funds; this carries out the policy announced by President Reagan on July 30.

President Reagan orders a 2 percent pay increase for white-collar federal employees, effective January 1, 1988.

Aug. 31—In the U.S. Court of Appeals for the District of Columbia, the Justice Department files papers challenging the constitutionality of the 1978 Ethics in Government Act, under which a special prosecutor may be appointed by a U.S. court to investigate possible wrongdoing by senior federal officials.

Economy

Aug. 6—Alan Greenspan, chairman of the President's Council of Economic Advisers, says that the administration has revised its estimate of the inflation rate for 1987 from 3.8 percent to 4.8 percent.

Aug. 7—The Labor Department reports that the nation's unemployment rate declined to 5.9 percent in July, marking the 1st time since 1979 that it has fallen below 6 percent.

Aug. 14—The Commerce Department reports that the U.S. foreign trade deficit rose to \$15.71 billion in June, apparently the largest monthly deficit in history.

The Labor Department reports that its producer price index rose 0.2 percent in July.

Trading action on the New York Stock Exchange reaches a 1-week total of 1.11 billion shares traded, and the Dow Jones Industrial Average of 30 blue-chip stocks rises a record 93.43 points.

Aug. 17—The Dow Jones Average closes above 2,700 for the 1st time, with a new record high of 2,700.57.

Aug. 21—The Labor Department reports that its consumer price index rose 0.2 percent in July.

The Commerce Department reports that the nation's gross national product (GNP) rose at an annual rate of 2.3 percent in the 2d quarter of 1987.

Aug. 25—The Dow Jones Industrial Average closes at a new high of 2,722.42, with 213.5 million shares traded.

Aug. 26—The Commerce Department reports that the nation's foreign trade deficit rose to a record \$39.5 billion in the 2d quarter of 1987.

Foreign Policy

(See also *Intl, Arms Control, Central American Peace Plan, International Terrorism, Iran—Iraq War; Iran; Israel; Nicaragua; Pakistan*)

Aug. 1—In Hanoi, John Vessey Jr., retired chairman of the joint chiefs of staff and special envoy to Hanoi, opens negotiations over the U.S. soldiers missing in action dating from the Vietnam War (the MIA's).

Aug. 2—A State Department spokesman says that despite the riots in Mecca, the U.S. remains committed to providing naval protection to 11 reflagged Kuwaiti tankers.

Aug. 3—Vessey leaves Hanoi, reporting no progress after 3 days of discussions.

Aug. 4—Secretary of State George Shultz outlines the proposed Central American peace plan drafted by the administration and House Speaker Jim Wright (D., Tex.); it calls for an immediate cease-fire in Nicaragua, and the withdrawal of all foreign military advisers and support from Nicaragua, with all negotiations to be concluded by September 30.

Aug. 5—President Reagan claims that his new peace plan for Central America has received "general agreement" from administration officials and the leaders of Congress.

Aug. 6—Shultz says that there is "no way in which the U.S. would want to sit down with Nicaragua to decide what is right for Central America." Two days ago, Nicaraguan President Daniel Ortega Saavedra said that the 2 countries should have discussions of "an unconditional nature."

Aug. 8—President Reagan expresses qualified support for the Central American peace plan drafted by the Central American Presidents, but says "there is much work to be done by the parties involved."

Aug. 10—Vessey reports that Hanoi insists that it has no control over any living U.S. MIA's.

Aug. 13—The Agency for International Development announces the withholding of U.S. funds for the UN Fund for Population Activities because the fund supports coercive abortion in China.

Aug. 14—Philip C. Habib resigns as special envoy to Central America.

Aug. 15—In his weekly radio address, President Reagan says that the U.S. should support the Nicaraguan contras until "a cease-fire has occurred and a verifiable process of democratization is under way in the Central American country."

Aug. 17—Assistant Secretary of State for Inter-American Affairs Elliott Abrams leads a discussion among senior U.S. diplomats to Latin America; the diplomats are warned to express concern over the ambiguities the U.S. sees in the Central American peace plan proposed by the 5 Central American Presidents.

President Reagan names just-resigned *Time* editor-in-chief Henry Grunwald as U.S. ambassador to Austria.

Aug. 19—U.S. naval escort vessels begin a 3d voyage with reflagged Kuwaiti tankers through the Persian Gulf.

Legislation

Aug. 3—The Senate ratifies the nomination of Alan Greenspan as chairman of the Federal Reserve Board by a 91-2 vote.

Aug. 4—The Senate votes 96 to 2 to approve the Competitive Equality Banking Act of 1987, which was passed by the House yesterday by a 382-12 vote; the measure is designed to support savings and loan association insurance programs, regulate the creation of limited-service banks and

require the more rapid clearance of depositors' checks, particularly local checks.

Aug. 7—The House, in a voice vote, and the Senate, voting 51 to 39, approve a new debt limit through September 23, in order to avert government default.

Congress adjourns until after Labor Day.

Military

Aug. 21—Marine Sergeant Clayton Lonetree, a U.S. embassy guard in Moscow from 1984 to 1986, is convicted by a military court-martial on all 13 counts of espionage charges; Lonetree is found guilty of giving classified information to Soviet agents at the embassies in Moscow and Vienna, as well as a variety of other charges.

Aug. 24—An 8-member court-martial jury sentences Lonetree to 30 years in prison, a fine, loss of all pay and a dishonorable discharge; Lonetree's lawyers will appeal the sentence.

Political Scandal

Aug. 3—The combined House and Senate committees investigating the Iran-contra arms deal end the public portion of their hearings; panel chairman Senator Daniel Inouye (D., Hawaii) says the hearings developed a "chilling story, a story of deceit and duplicity and the arrogant disregard of the rule of law."

Aug. 19—In closed hearings before the panel, Central Intelligence Agency official Duane Clarridge says that in 1984 high officials of the Reagan administration approved a plan to ask South Africa to pay for training and equipment for the Nicaraguan contras.

Aug. 20—The Swiss Federal Tribunal approves a request permitting Swiss banks to turn over confidential documents relating to Richard Secord, Albert Hakim and Manucher Ghorbanifar, who were all involved in the Iran arms deal.

Aug. 25—In testimony released today, CIA deputy director Clair George tells the panel that deceased CIA director William Casey refused to listen to his objections to the people used in the Iran arms deal and had begun to "wire around" (bypass) those not willing to take part.

Aug. 26—In testimony released today, Clair George told the panel that the CIA believed the Iran deals were "hare-brained schemes" and that administration pressure from President Reagan and Casey caused senior officials "to do and run operations that are now, after the fact, foolish."

Aug. 27—Rear Admiral John Poindexter applies for retirement at his previously higher rank of Vice Admiral.

Politics

Aug. 26—Former Senator Paul Laxalt (R., Nev.) withdraws as a candidate for the Republican nomination for President in 1988, citing a lack of financial support for his candidacy.

Science and Space

Aug. 30—A redesigned shuttle booster rocket passes its 1st firing test.

VENEZUELA

Aug. 4—An appeals court upholds the acquittal of Cuban exile Orlando Bosch, who was accused of planning the 1976 bombing of a Cuban plane that killed 73 people; Bosch has been imprisoned for 10 years despite 2 previous acquittals.

VIETNAM

(See *U.S., Foreign Policy*)

ZIMBABWE

Aug. 21—The lower House of Parliament passes an amendment abolishing the practice of reserving 20 seats in Parliament for whites only.



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